Instructions in Painting IN
Oil and Water Colors ON. SILK • SATIN • VELVET. AND OTHER FABRICS By
Susan Hale
Including
LUSTRE AND KENSINGTON
PAINTING

# Digitized by the Internet Archive in 2016 with funding from Getty Research Institute 

## SELF-INSTRUCTIVE LESSONS

IN PAINTING WITH

## OIL AND WATER-COLORS

ON

SILK, SATIN, VELVET

AND OTHER FABRICS

INCLUDING LUSTRA PAINTING AND THE USE OF OTHER MEDIUMS

BY
SUSAN HALE.

BOSTON:
S. W. TILTON AND COMPANY.

# Copyright, <br> By S. W. Tilton \& Co. <br> 1SS5. 

ELECTROTYPED BY
C. J. Peters and Son, Boston.

THE GETIY CENTER
LIBRARY

## CONTENTS.

ChapterI. Introduction13
II. Drawing ..... 25
III. Drawing (Continued) ..... 39
IV. Design ..... 49
V. Selecting Designs ..... 59
VI. Pigments ..... 69
VII. Colors, Practical. ..... 83
VIII. Colors, Theoretical ..... 97
IX. Ligitt and Silade ..... 103
X. Transparent Water-Coloris ..... 117
XI. Liquid Colors ..... 129
XII. Gouache or Body Colors ..... 139
XIII. Oil Painting ..... 149
XIV. Painting on Silk and Satin ..... 161
XV. Painting on Velvet ..... 175
XVI. Lustra Painting ..... 189
XVII. Lalaid Painting ..... 205
XVIII. Tapestry Painting ..... 219
XIX. Water-Colors on Muslin, etc. ..... 231
XX. Painting on Gold Paper ..... 239
XXI. Painting Transiparencies. ..... 245
XXII. Painting on Wood and Leather. ..... 253
XXIII. Stencilling ..... 259
XXIV. Wiat to Decorate ..... 265

## Materials.

OUR original intention was to give a detailed price-list of all the materials required to carry out the instructions given in this volume; but, after preparing the list, we find it will occupy so much space that we have decided to print it separately, and will mail it, free of expense, to all of our patrons who will send to us for it.

It will not be necessary for the beginner to buy the most expensive materials for first practice. Take colors, for instance: the Dccorative Art box recommended contains ten good and true colors. They are not so expensively prepared as the finer grade, but, after being applied side by side, it will require an expert to detect any difference between them.

A saving in expense can also be made in the brushes. A camel's-lair brush, No. 7, and a sable of the same size, appear so much alike that the beginner would be as likely to choose one as the other; and yet the sable will cost a dollar and a half, while the camel's-hair can be bought for twenty-five cents. Of course, the sable is the better brush, and, to one who knows how to use it, is worth the difference; but while learning, the cheaper one will answer every purpose.

Then in paper another saving can be made. There is paper expressly prepared for water-colors which is expensive. It is no better for the beginner to practise upon while he is learning about colors than the $\log$ paper, which is offered as a substitute.

One object in preparing this book was to cnable those who have had no previous experience with pencil or brush an opportunity to produce comparatively immediate results. The "Transferring Designs," described on another page, can be made to take the place of a knowledge of drawing, and with little practice, as recommended, with colors, such a result can be accomplished.

## TRANSFERRING DESIGNS.

The working of these designs is very simple. Any one, by following the directions, can use them in transferring an outline to any material desired, and which may afterwards be finished with pencil, brush, or needle.

Those who have no knowledge of drawing can, with the aid of these designs, make many pretty and ormanental articles for presents or for sale. Those who prefer to draw their own designs can have them made transferable by us, so as to reproduce them over and over again without the trouble of stopping each time to make a drawing. They can be used for lustre and Kensington painting, and also on any matcrial, including silk, satin, velvet, and all other fabrics; plaques, china, paper, wood, doors, walls, ccilings, etc. ; and, in fact, anything which one desires to decorate.

We can furnish a colored, or partially colored, copy of any pattern mentioned in our list; the price, which will be given on application, will depend on the amount of work put into it.

Any patterns not on our list can be made to order. The designs are all sold separately at the prices set against them.

We are coustantly publishing new books of instruction, and new methods of art decoration (self-instructive), descriptive circulars of which we will send to any address on application.

> S. W. TILTON \& CO., Boston.

INTRODUCTION.


## CHAPTER I.

## INTRODUCTION. - ART AND TASTE.

The mania for promiscuous household decoration which seized upon society some years ago has already passed its height, and women are begimning to recognize that ornament, in order to be ornamental, must be rare in texture, choice in design, and good in execution. There was a time when it was deemed sufficient to put something on anything. Every straight line in a "decorated " drawing-
room was stretched with a lambrequin. Every square of cloth must have a sunflower or an owl, somewhere away from the centre, worked into it in an unsymmetrical manner. Even the commonest dish-towel must have a poppy thrown across its corner, and no mantel-piece or shelf, cushion, curtain, counterpane or chair-back was safe from the application of some "realistic" design, so called from a vague idea of imitating nature which had beset the executor, or rather the executioner, of the work. The trouble with these things was that they were done without sufficient thought and care, generally reproduced from the untrained recollection of some similar object. Heedless of the existence of guide-books, directions, patterns, good designs, which furnish to every beginner safeguards against bad work, young ladies rushed into the business of decoration with less preparation than they would find necessary before risking a visit to the kitchen with the intention of preparing some dainty dish. For that they would of course consult a cook-book, unless they had their receipt by heart. The more experienced the cook, the less she will trust her inspiration to make anything good. Rule, measure, accuracy, are her aim, and for this she dons her spectacles, as well as her apron, and after carefully studying the receipt, assembles all the materials it dictates, and, carefally following the written directions, obeys implicitly the laws laid down by some experienced artist in dough. Not so the rash decorators of whom I am speaking. There seemed to be an idea, and it still exists, that it is fine to do anything without knowing how. "Only think," it is said, "she did it without any instruc-
tion at all!" It is no consolation when we are offered a hard heavy biscuit, yellow with saleratus, to be told, "Only think, the cook did it without any instruction at all!" The reply in both cases would be, "I should think so; why did she, by the way, when it is so easy to learn?"

Lessons from experienced teachers are not always within range, nor is the time always available for long and steady practice in the studio of an artist. It is true that formerly these were the only methods of instruction, but it is now recognized that any clever girl may discover, with the aid of written directions, the secrets of the best work in decoration; and that such directions may be at the same time clear and simple, while giving a high aim to the learner, I have, with the aid of Mr. Tilton, prepared this little book.

I couple the word "taste" with that of "art," for the reason that it is essentially a feminine quality, and one that no woman need be frightened at. A girl may well be deterred from devoting her life to the pursuit of high art becanse she fears she has not talent; but few young ladies would be willing to avow that they are lacking in taste. Almost every young woman possesses a quick eye for form, a sensitive perception of color, and a general conscientiousness in regard to the fitness of things in all matters appertaining to dress. The costumes of pretty girls, planned chiefly by their wearers, which we pass daily in the street, or study in the opposite seat of a street-car, are, in general, simple, tasteful, and well chosen; and yet some wearer and designer of one of these costumes several years ago might have been perfectly capable of executing a hideous,
"realistic" poppy on a "greenery-yallery" ground, with a blue cornflower stiffly poked up against it, and a trailing vine, grown under the glass of a heated fancy, straggling from nowhere to anywhere. I say "several years ago," because all this, happily, has gone by, and such ill-judged performances have joined the majority in garret or chest, whither their predecessors, tall black panels decorated with the once inevitable sunflower or golden-rod, had gone before. It is because so many willing hands and brains, self-prepared for something better by the very discontent caused by these earily efforts, are asking for new light on good decorative art, that such text-books as Mr. Tilton's are in demand.

While the indiscriminate use of decoration, without discipline or judgment, therefore, is dying out, our drawingrooms are none the less in need of true ornament. We shall not return to the bare, dreary parlors of fifty years ago, where a stiff row of horse-hair chairs flanked a hard horse-hair sofa on the four sides of a large, square room, with a square centre-table, and a rigid mantel-piece sternly surmounted by a clock and nothing else. Our rooms will be fitted up with pretty furniture, and moderately filled with knick-knacks; embroidery and painted decorations will be used, though sparingly, and their design and execution will be marked by a knowledge of the rules of art and the exercise of good taste. These two things must control the selection of objects of ornament, and the execution of such as are made ly amateurs, just as much as of those bought in shops. The time is gone by when it was enough to say, "Only think, I made it myself!" to
extenuate defects, or even to win praise for a bit of ornamental work. There is now so much competition among amateur as well as professional artists, that a piece of work must be absolutely good to be approved at all, or admitted into any collection of ornamental work. With fancy-work, so called, it is now a question of the survival of the fittest. Since the world has been flooded with panels, lambrequins, plaques, and banner-screens, it is only the best that can survive, although, in this case, it is these that will go to the wall.

The very name "fancy-work" must be given up; for it is not unrestrained Fancy that rules the hour, but Fancy, no longer free, put in the close trammels of convention and rule. Some people will still demur at this decision; but, after due reflection upon the sad results of Fancy rioting umrepressed with the easily-handled materials of modern decoration, even these must acknowledge the need of law and order, and consent to follow written directions in the parlor as well as in the kitchen.
" In maiden meditation, fancy-free."
no longer must the young enthusiast throw a plush owl across a floss moon in the corner of a cotton-flannel antimacassar. The trouble with these fancies, by the way, was that they were often the fancies of some one else, imitated and reproduced to the detriment of the original idea, so that not one, but many owls, flitted across countless moons upon innumerable anti-macassars.

I speak here indiscriminately of decorated objects in the form of embroidery or any sort of painting, for the reason
that the same prineiple applies to all of them. These things must be good, taken from good models, rather than original in design and conception, or they will be bad. No matter whether worked with the needle or laid on by the brush, no matter how delicious the texture or delieate the tints employed, it must be that the forms seleeted, the judgment used, the taste displayed, in the exceution of sueh objeets, are what will render them worthy to survive. or eondemn them to prompt withdrawal from the position they were intended to occupy.

Embroidery, the directions for whieh are to form no part of these pages, is closely allied to all the other methods of decorating, and the same rules of art and taste are as binding upon the needle as the brush. Thus, while the progress of the arts of the necdle has done much to elevate the general taste and tone of decoration, cunbroidery is responsible for a good deal of lawlessness in the matter of design. There was once a wholesome fear of meddling vith the implements of high art, which restrained women especially from rash attempts at ornamentation. The peneil and palette of Raphael were too sacred to be applied to trivial purposes; it was thought that it was neeessary to be a true artist, born and inspired. in order even only to possess paints, palette, brushes, and eanvas, with whieh to carry out artistie ideas. But needle, thimble, and scissors arc essentially the weapons of ous sex, and nothing could prevent the use of these for orma mental purposes. This caused the flow and overflow of untrained embroidery and needlework decoration. Bolder grown, women have diseovered that it is as easy to exe-
cnte designs with the brush as with the needle; a little paint is as cheap as a skein of embroidery floss, and a prepared pauel cheaper than a yard of velvet; until at last the natural order of things is so reversed that embroidery itself is imitated, and a pen filled with color is made to reproduce the long stitches of embroidery.

I must repeat, and still repeat, that while it is as easy for the cunning, skilful hand of woman to execute designs in one medium as another, not one of these designs will be worth anything, with whatever material it is executed, unless the design, to begin with, is good. For this reason it is best to begin with designs already prepared. Rumors are constantly arising that this and that new form of ornamental decoration is "real easy to do," and girls drop the difficulties they have been struggling with to fly to new ones that they know not of. Let them learn, once for all, that one great law underlies all these things, the law of harmony and taste. This once mastered, every new fashion of doing decorative work is easily acquired. Auy good book of directions will enable any clever young person to get the knack of using any vehicle of expression, and by the use of such instructions, with well-selected patterns of good designs, the eye is trained, the judgment matured, the taste allowed to exercise itself in the right direction. Without such guides, every new attempt will be but failure, every new result will have the same old bad qualities with the rest.

The fact is every day becoming more and more widely recognized, especially in the field of embroidery, where the reaction from indiscriminate execution is almost uni-
versal, that it is better to trust to designs prepared by skilled persons than to impromptu invention. The admirable teaching of South Ksnsington has done much to improve the style and elevate the designs of amateur workers. It is always to be borne in mind that the same rules of art and taste apply to the brush as to the needle: in this way cach will elevate the other.

Artist's materials are usually regarded as higher in the scale of mediums, as means of artistic expression, than those of the needlewoman. All pigments, whether used through the vehicle of oil, water, turpentine, or gums, are regarded with respect as the materials by the aid of which the highest inspirations of the great artists have been expressed since the time of the great masters of art ; and the canvas and panel must, with these pigments, take the same high place. Howevcr beantiful the shades and tints which modern chemistry has applied to flosses, wools, and threads, however rich the folls of satin and velvet upon which these materials may be spread, it must be rememhered that the brush is higher than the needle, in the grade of artistic implements.

I repeat that this can best be done by consulting a goorl book of directions, and by beginning, at least, with the use of such patterus and designs as are furnished by Mr . Tilton expressly for the use of beginners. In this book I have tried to make the directions for each process described as simple and clear as possible: the paints and other materials mentioned can be procured at small cost. and the use of them acquired by practice upon designs made expressly for begimners. If such designs are em-
ployed, and the directions carefully followed, any intelligent person will be able, not only to make at first very pretty and attractive gifts and ornaments, based upon good principles of art and taste, but she will find herself growing more and more capable of more difficult, more elaborate, and more individual work.

## DRAWING.

Lead-Pencil, Faber No. 3. Block of Log-Paper.

A Measuring Card or Rule. India-Rubber:

Although the larger number of those who consult this book for instruction will rely upon some meehanical method for reproducing the outlines of the design which they desire to paint, simple instructions for whieh are given on another page, there undoubtedly will be some among our readers who will wish to learn how to draw, so that they may make their own designs. To those we will say that any one who ean learn to write ean learn to draw, -mind, we say learn: that does not mean that it ean be done by being told how, any more than one can learn to write by being told how.


## CHAPTER II.

## DRAWING.

As I am not endeavoring, in this book, to instruct students who are proposing to themselves to become artists, with the hope of making it their life-work and attain thereby not only fame and success, but the satisfaction of developing to the utmost the powers and capacities of their nature, I shall not undertake to give much space to the subject of drawing. But I cannot properly omit saying that accurate drawing is the foundation and basis of all good work in decoration, which is the subject
of this text work, just as much as in all the higher forms of art. I do not mean, by this, to condemn amateur work, or to deter begimers from trying to sell their productions, but only to induce them to fix before themselves the idea of accuracy as indispensable. It may be attained by any iudustrious begimner, for accuracy is the reward of perseverance rather than the gift of inspiration. The reason that so much of the amateur work which stares us in the face in many a shop window is hopelessly bad, and, with justice, hopelessly unsalable, is that it is not based upon any principles of accurate drawing. The reason that a great deal of such work, almost as bad, does sel! is, alas! that the eye of the purchaser is as little trained in good drawing and design; so that, tempted probably by a price below the merits of the material and the time spent upon ornamenting it, but far above the artistic worth of the work, she takes it home, perhaps to inflict it as a gift upon some "artistic" friend, perhaps to make sad the lives of her family by a constant sight of an imperfect piece of work.

It may be that such things are bought from compassion for the maker, who, in need of money, with praiseworthy intent, is seeking to earn it by her brush. It seems severe to say it, but it is all wrong to mix up charity with patronage of art in this way. A first-rate piece of decorated work, either embroidered or painted, commands a high price in the market, and with justice, as the result of natural talent and taste, joined with long practice, ani money spent in lessons. Poor imitated work, carelessly done by, women of little talent and no practice, snatching
a few second-rate ideas from second-hand work, floods the market and lowers the standard of excellence, bringing disrepute upon the whole class of objects imitated. A striking example of this is flower painting, which is and should be a favorite style with all classes of artists; one of the most exquisite, natural, and attractive branches of art: one which the greatest masters have not disdained. Becanse so many women think that "flowers are easy," the whole subject has become degraded, and it is the commonest expression, "I hate flower painting!" or "I don't want to learn to paint flowers," as if the poor things themselves were lowered to the rank of turnips and potatoes, beneath the notice of art. The fact is, that flowers are extremely difficult to paint; it may be said indeed, that it is impossible to paint roses; but we shall always be attempting to give something of their charm. It is hard that the flowers themselves should be held responsible for the feeble failnres of amateurs to represent them. The only thing that is "easy" about flowers is their accessibility. It is almost always possible to have some as studies; but they droop so soon that the subject, even well arranged, is constantly changing, and by the time the composition is well drawn in, it is entirely altered. The roses and most of the hot-house flowers at hand in winter are most complex in form and delicate in coloring; there are bnt a few large simple ones, such as lend themselves best to flat decorations.

Nevertheless as they are, on the whole, so well adapted for decoration, I shall, in the directions in this text-work, speak of petals and leaves as if these were the objects in
hand, giving, however, suggestions as to other things which may be used instead of designs.

To avoid the difficulty of the pronouns " he " and "she," I am going to take it for granted that my readers are women; for, to be sure, they will be for the most part, since our sex is still the one most at leisurc for amateur work, and most likely to try to pick up an honest penny by art decoration. It is precisely that the penny so acquired may be honest that I am writing this book, in the hope that it may encourage women to good, earnest, original work based on faithful drawing of worthy designs. I must explain my use of the word "original," lest it shall be taken to mean a vague creation of objects purely out of your heads, seen nowhere in the heavens, or earth, or waters under the earth. I consider that it is not original to "do" a golden-rod on a black panel of a certain width and height, because another girl has done one and it was "real pretty," even if you make your own design for your golden-rod out of your head, with a vague recollection that golden-rods are yellow and fluffy and stiff, rather bending over at the top. It would be original, if you wanted to "do" a golden-rod on a black panel, to spend all your spare time in August in studying golden-rods; in noting the small differences in the sixty-nine varieties; in observing their manner of growth, and deciding which one would suit best a long, thin panel; in discovering how the little pale-yellow butterflies that come and sit on them help along the color, and how harmonious the purple-brown tints of the fading flowers are with the still brilliant yellows of later blossoms. I do not expect you to be as
original as this for the sake of one panel; but, if you mean to decorate much, the best thing you can do is to study and paint flowers all summer, so as to begin the winter with a portfolio full of subjects for design. But before doing this, or without doing it, you may decorate with charming effect by using patterns and designs already drawn for you, and furnished to your hands.

You can teach yourselves to draw, if you are in earnest. The chief merit of taking lessons is to have a teacher at your ellow to urge you along, and the arditional stimulus that while you are paying for the lessons you had better have the good of them. Of course, if you are taking lessons merely to fill up the time, and do what the rest are doing, you may not make much progress even then; but if you are in earnest, you may do great things without a teacher.

There is an impression that drawing from flat copies does no good; but I am convinced that it is the best way to begin. There are two ways of drawing everything; viz., a right way and a wrong way. If you will insist upon begimning in the wrong way, and persist in going on so, yon never will learn to draw, so it is better to begin in the right way. It is possible to spend years drawing from flat copies, and to become very skilful at it, without makingthe least real progress in drawing ; but there is no occasion to acquire the habit of doing it in this useless manner. You should never suffer yourself to copy mechanically, with eye and hand alone, your mind wandering elsewhere, planning a new bonnet, reckoning up your accounts, thinking of anything or everything rather than of the work before you.

Take this simple outline of a sweet violet from Series V., Tilton's Outline Design-Cards, Studies of Flowers from Nature, cousisting of, 1. Yellow Oxalis ; 2. Pansy; 3. Sweet Violct; 4. China Pink; 5. Tulip; 6. Cyclamen. These designs arc drawn true to nature, as studies for flower painting. Mr. Tilton has plenty of others which will answer just as well. If you are pretty clever, you will soon produce a copy like this, which will look quite a good deal like the subject, without having the slightest merit.

In the first place, establish yourself in a window where there is no sun shining in (a north light is best), and where there is no cross light from some other window to dazzle your eyes and confuse the shadows on your future work. See if you cannot have a little table, with a drawer, in this same place, to keep your materials all together on and in, and try not to be interrupted for a couple of hours. This, I know, is the hardest part with us women, but you had better try for it.

Any paper will answer for this drawing; but, if you think you can make it look well enough to paint later on, have a block of good drawing paper. Paper is made expressly for water colors, known as "Whatman's paper." It costs more than ordinary paper, and is not necessary for begimers. Mr. Tilton's blocks of $\log$ paper are just the size for this practice, and may be had at a lower price.

Mark out on the paper a space just the size of the card you are copying from. In all decorations the spaces out-

scale.
side the design, and the sides of the thing it is done on, are just as much a part of the design as the petals and stem of the flower.

Have a visiting card or old post-card to measure with, and do not disdain to measure all the time; but do it in the right way, according to my directions here given.

Put a dot on your paper where you think, judging by your eye, the top of the upper violet is. Now measure the distances $A B$ and $A C$, from the edge of the copy to this point, and see if your distances are like them. These distances must be parallel with one side of the picture and at right angles from the other. Very well, if your dot is right ; if not, rub it out, and put it right. Now make a dot on your paper at D , for the centre of the violet. Do not make it till you have observed, by your eye, carefully where it should be; i.e., below $A$, but a little to the right of it, at a distance somewhat longer than AB. After you put the dot at D , measure on the copy the distance AD , and see if you have it right, and see if the measuring card slants on yours just as it does on the copy. If not, alter your dot. To test the right position of your dot, take the measure on the copy of ED to the edge, and see if it corresponds with yours. Put a dot at H , where you think the widest part of the upper left-hand petal is. Be half an hour, if necessury, in establishing these points, in order to start well.

Now I think you can draw the lines of the two upper petals by your eye by first making AHD, then putting a dot for F , a little lower than $A$, then a dot for $G$ where the widest part of the right-hand petal seems to you to
be, then draw FGD. When these two upper petals are done, measure your distance HG , and see if it corresponds with the right HG. [Do not put on your work the dotted lines that comncet the letters, they are here only to show what I mean.] HG is a very little shorter than AD, just as AD is a little longer than BA. To make sure, measure to see if you have the distance GI the same as ED. In measuring, put the left-hand side of your card close to the left-hand margin of your drawing, and of the copy, as these horizontal distances are at right angles with the upright side, and the well-cut corner of your measuring card will ensure accuracy in this respect. This is to train your eye to recognize horizontal lines and distances, and also vertical ones. Accuracy in drawing is got by noting how points vary from these two directions. You can finish the upper flower now, making your own dots and deciding upon their distances. Always draw a flower with regard to its central point [marked D in this instance], that is, put dots for J, K, and L, by first judging and then testing by measure their distance from D , and the direction of slant they have to take to reach it. When the upper flower is drawn, sit up and look at it Does it look twisted? It is because you have put J and $\mathbf{K}$ too high mp. K should be almost directly under A , the least bit to the left, as you can prove by laying your measuring card npon those two points.

I have said enough to give an idea of the process. You may go on and draw the whole, but with the same caution. Never make an outline until you have decided with your eye, and settled with a dot, its destination. With your
eye you can certainly juclge the short distances, - as, for instance, that between $L$ and the adjacent green leaf. Remember that there are two things to be thought of in deciding where to put your dot:

1. The distance off from the point nearest it which is already drawn.
2. The direction from that point; i. e., the "slant" differing from perpendicular or horizontal. You can tell this surely by your eye. For instance, as before, D is below A, but a little out of the perpendicular. If you put the corner of your measuring card at $B$, over the left side of your copy, you must see exactly in what direction the line A slants; the distance you get by comparing AD with AB with your eye, and seeing it is a little longer.

Make the lines nearest those already secure first. Do not think, for instance, of continuing the stem of the upper flower down to the lower leaves until you have drawn the whole of the left-hand sideways flower. When this flower is drawn, you will see that M, where several stems meet, is on a line with the bottom of its lowest flower, at right angles with the side. A dot there, precisely under F , for which you can establish the place by a vertical line on the side of your measuring card, at right angles (decided by the corner of the card) to the upper margin of the design, is the place whence this upper leaf springs in the middle of the little triangle where the three Hower stems cross each other, M.

If you are in earnest, yon will be willing to follow this detail, and will readily grasp it. You will be rewarded by a copy as accurate as if it were traced, with some knowl-
edge added of the way stems and leaves group themselves.

Do not attempt "grateful" curves in comnecting your dots with the lines of the drawing. If you put dots enough, direct lines between them will give the character of the outline better than random curved lines, and after you are used to good work, you will agree with me that such ill-directed curves are not graceful, but disgraceful.

## DRAWING <br> (CONTINUED).



## CHAPTER III.

## DRAWING (continued).

You will find, when you have once acquired the practice of copying by putting dots at every point before drawing the line required, that it becomes a sort of second nature, and that you are almost mechanically, while rapidly, deciding by the eye where the dot should be, and adding the connecting line between that and what was drawn before. At the risk of too much repeating, I must try to make you see the difference between this method, and that of measuring off on your copy the distances, and transferring these to your own work. A clever girl can cheat her teacher and herself by working in this way, but it is a mere waste of time, for after any length of time spent in such drawing she will be less capable of making
an accurate copy without such measuring than at first. There are but few occasions where such copying by direct measure can be used, and it is, at the best, a tedions process; whereas, by the use of judgment in putting the dots, and then proving them by measurement, the eye is trained so that it soon judges accurately, and you will find that in time you will arrive at always trmsting your eyc, as the masuring will prove.

To make sure that you are making progress, the next step is to draw on a different scale from the design,- I mean, to make your copy larger or smaller than the subject. If you have been measuring first, and accepting the measurements without exercising any judgment, you will now find yourself all at sea; if, on the other hand, you have been conscientiously dcciding your own distances, you will soon be able to cnlarge or reduce any pattern at will, and this is quite necessary in decoration, where it is sometimes best to adapt the dimensions of flowers or other objects to the space they are to occupy, without regard to their size in nature.

Rule upon your block of drawing paper a space with lines $6 \times 4 \frac{1}{2}$ inches, making sure that the corners arc right angles. A tin ruler is a good thing to have, accurately cut at the corners, that they may be used to make right angles, and marked off with inches. Down in the left hand corner of this ruled space mark off an inch and a half, and divide it into halves, and that half again into halves, as I have done in the comer of the sweet violet pattcrn, which we will usc again for the enlarging process. I call this little marked-off place our scale of measurement. Do not, after this, worry your mind with thinking of
inches and half inches, they have nothing further to do with this drawing, which is a matter of proportion, not literal measurement.

Compare (with your measuring card) onr old friend, the distance BA, with the scale of measurement. It first matches the half, does it not? Try CA: it is the whole scale, and a quarter more. Very well, put your first dot, for the top of the upper flower, on your own paper in the place which, by your own scale, is half the length of it down from your top line, and one and one fourth from the left-hand line. Here is the place to begin your drawing. Measure on the copy AD, and compare it with the scale in the corner. Notice how much more than half the scale it is, and by your own scale, and that more in proportion (about one eighth), decide where to put a dot for $D$, putting it not directly under A , but, as before, somewhat to the right, so that the line (if there were one) between them should slant just as much and no more than the line in the copy. Go on as before, judging the distances by your eye, and proving them on the scale: you see the proportions are the same, though the actual distances are different. Thus the distance between $A$ and $F$ is abont one fourth of your scale, and F must be a little lower, horizontally, than A; DL is about one half the scale, and so is GL. Go on now with the work in this war. It is the same as the first lesson. You have still to judge by your eye (1) of the direction (ont of perpendicular and vertical) of each new point; this, of course, is the same whatever the size; (2) the distance which must be compared with the scale of the copy, and then with your wwn
scale in the corner of your own work, before putting the dot which decides its position.

I use the word "about," not to enconrage inaccuracy, but greater watchfulness of eye. Do not be discouraged if yon do not grasp my idea at first; I have explained it sometimes to a girl all winter long, and discovered late in the spring that she had no notion of it, but if you put your whole mind to it right off you can master it, and it is worth while to thoroughly understand it, and work by it, for the principle is at the base of all good drawing. When you come to draw from real objects, you must use this seale of measurement, for you camot put measuring cards across real violets, even if you are drawing life-size; in drawing from objects it is far better to rely on a scale than on actual measurements ; and in drawing from lifeI mean figures - you generally are drawing smaller than life, so that you cannot use direct measurements.

When the drawing is well started, with one violet, for instance, drawa in upon the new scale, you will be surprised to find how your eye reconciles itself to the new proportions, and yon will soon be putting your dots in their proper places without stopping to measure once. But test their accuracy from time to time, or you may find yourself at the bottom of the paper with no room for stems and leaves, or overflowing the right-hand margin with the petals of the bud. Do not neglect the dots. Never start upon drawing a line withont clearly defining (with a dot) the direction and limit of ic. and then put it in with a firm stroke, as decided at its end as at its beginning. Seratching, tapering strokes, aimed nowhere, and turning up anywhere, patched and joined with others equally
vague, are sure signs of want of purpose. You must know first what you want to do every time you make a stroke with pencil or brush, or it will not help your work. There is no luck in good drawing or painting, though amateurs go ou scratch-scratching, or dab-dabbing away, hoping that some miracle will influence the results. So a fly, fished out of an inkstand, runs about, leaving traces of his passage all over a sheet of paper; the marks he makes may be interesting, but do not form a picture.

When you have finished the enlarged violet, which will look gigantic, but, I dare say, effective for decoration, you may try one smaller than the copy, or any size you like, taking care to have it different from that of the subject. The proportions of the enclosing space should be three one way and four the other, that is, the scale in the left-hand lower corner is one third of the bottom line (also of the top line, which is the same length, of course). The side is four times as long as the scale, making the enclosure one fourth longer than it is wide, or, as I have just said, it is three one way and four the other. Any of the six flower designs of Tilton's Series No. 5 are very good for practice in this careful drawing, aud, as they are suitable for clecoration, you will do well to practise upon them all, enlarging and reducing the design of each, for you will then have on hand the beginning of a collection of designs ready for use in future decoration in any of the various methods by and by described in this book. For, though' in the chapter on design, I am going to recommend the selection of good subjects wherever you can find them, rather than relying upon your own imagination to invent them, you cannot go far without the power of
copying well and accurately such designs as please you. All the artificial methods of tracing and transferring are less efficient in the lands of all those who cannot, by natural gift or by training, draw at least a little. It is astonishing how bad and inaccurate even a tracing can be by awkward hands. Paper patterus, made by cutting out a shape previously laid on the paper and marked round, are altered by carelessness and want of skill, which is the reason that forms transmitted in that manner become in time so shapeless.

However mechanical the method by which you are transferring a design, do not lose your individual sense of the nature of it. Thus there are several things to be borne in mind about flower designs.

1. 'Try to have the centre of a flower in the middle of it, and regard each petal as having a middle line leading direct to the centre of the flower. As the spokes of an umbrella mast all meet in the converging point, every Hower has secret spokes on which it opens and shuts, all converging towards one point at the end of the stem. Whether the flower in the design faces you or is turned sideways, this central point is to be regarded and respected. Moreover, it is from this point that the stem springs, and although, generally, the place is unseen behind the petals of the flower, it must appear to start right by the direction of it after it comes to view.
2. When a stcm disappears bchind a leaf, take care that it emerges as it would at the other side, and do not neglect to account for all the stems of each flower or leaf in the group.
3. Leaves also have their spokes, or back-bones, and most leaves are so folded in the bud that they retain all their lives an appearance of having been creased down the middle. Bear this in mind as you indicate these markings, which I call construction lines.
4. Both flowers and leaves are, by nature, symmetrical, and it does not answer to pervert this symmetry much. When a flower or leaf faces you in the design, keep the petals of equal length, and the halves of the leaf equal; when it is turned away, or fore-shortened, make the proportions still appear to be symmetrical, only influenced by the position.

It will help you very much in drawing, and in selecting your designs, to examine real flowers, especially our wild flowers, which, for the most part, are simply made, in order to be familiar with their construction, and to avoid such mistakes as painting a single rose with six petals and a lily with five flower-leaves. In order to make yotur own designs, this is of the highest importance, and a little knowledge of the pleasant science of botany is quite desirable. By thoughtfully turning over the leaves of "How Plants Grow," by Professor Gray, you will receive good ideas of the forms of petals, which will help the training of your eye, and prevent your painting them much out of shape. And if you will look at the next bunch of flowers that comes to you, you will like to notice the invisible spokes that open and shut the corolla, like a floral parasol. and the back-bone of the leaf along which it was folded in the early spring before it spread itself out to sunshine.

DESIGN.


## CHAPTER IV.

## DESIGN.

It is just as important to understand the laws of design, in order to select good designs for decoration, as it is to make them; therefore it is impossible to escape some study of the subject. The failure to please, in many amateur efforts, is due to the selection of some improper or uninteresting subject, rather than to the feebleness of its execution, and this selection is often merely a weak imitation of something previously attempted, rather than a good healthy exercise of individual taste.

I use the word"design" in its more modern acceptation, simply as more definite and convenient than "pattern" or "copy." The word "design," in Addison's
time，meant＊the idea which an artist endeavors to execute or express ：＂lut it has now come to imply fur－ ther the embodiment of that idea upon paper，outlined so that it may be more fully carried out by the artist himself，or some other worker．

There are three kinds of designs which may be adopted for deeoration，which are these：－

1．Designs of pure invention，imagined，and not imita－ ted from anything in nature．

2．Designs directly imitated from nature，in whieh the subjeet followed is closely copied both in design and coloring．

3．＂Conventional＂desig＂us，by which natural objeets are＂generalized＂and taken as types both in form and coloring．

These three ways of decorating are all good，eaeh being more or less suitable to the various occasions for which they may be used．The first，designs of pure inrention， are those geometrical combinations of curves and lines． including what are often called arabesques，because so many of them are found in Arals or Moorish ormament． The Mohammedans，who carried gracefnl ornament so far， considered themselves forbidden by the Koran to depict the forms of created things，and so had to expend their oriental，rich fancy upon invented forms：for while flowers came not muder the prohibition，they lent themselves readily to geometric combinations．Hence eame their wonderful rose－work，based upon the geometrical forms of the triangle，square，pentagon，and eircle．The variations wonderful in these forms are immmerable，effeeting the
most intricate interlacing of lines, with spaces left between them for that color. Ali these arabesques are grood for decoration, and may be directly taken from books containing them with good cffect for stencil patterns, and the decoration of surfaces requiring straight lines. The socalled "Greek patterns," too, are simply geometric.

It may be said pretty safely that all possible combinations of these geometric forms are already discovered, and therefore to be found in books.

The second, designs imitated directly from nature, are, according to the present general judgment, better adapted for the easel than for decoration. An exquisite study in water-color of a mass of roses should be put under glass, framed, and hung. A portrait is a work of art. You do not want to see the likeness of your favorite grandmother at the bottom of a saucer, painted on china; and if not her image, why that of any one else less dear, even of an imaginary shepherdess? Realistic figures of birds and animals lend themselves somewhat better to decoration; but on the whole it is conceded, at least by the present fashion of taste, that the Mohammedans were right in excluding from ornament the forms accurately presented of created things. This verdict of fashion and taste is what, perhaps, has brought into vogue the present interest of anateurs in decoration, for the highest inspivation is not required to execute the objects appropriate to design. While artists devote their lives to the perfection of skill in painting the luman form divine, transferring to canvas the charm of landscape, and imitating as far as possible the exquisite subtleties of color and form rlisplayed in
flowers, decorators, availing themselves in some measure of the same skill, and helped by the combinations of geometric forms already discovered in arabesques, may accept the third method, conventional ornament.

This term has been a stumbling-block to beginners, and there las been, though it is now disappearing, a feeling that there must be something wrong, a disloyalty to nature, in diverting natural forms to the uses of art. But it is now admitted very generally that nature can be better honored than by putting all sorts of natural designs upon surfaces to be decorated. It is hard to say why we are tired of seeing flowers "thrown" in a realistic manner across any piece of decoration, but it certainly is the case. Probably it is because it has been so often badly done. A beautiful bit of realistic work will always be admired. but we must regret seeing much labor and time spent over work upon materials subject to injury, and not very durable at the best. On the other hand, realistic work crudely done makes us wish more time and thought had been spent upon it in the way of "conventionalizing."

A study of ancient pottery, middle-age illuminations. and old tapestry will show how among all nations, with the progress of art, conventional forms have gradually developed from nature. The forms of leaves and petals being geometrical and regular, may be repeated just as the simple geometric forms of triangles and circles are in arabesque. These forms have been combined to make a consecutive pattern, first complete in a certain space, and then repeated, if need be for long lines of decoration. The eye is certainly pleased by a recurence of forms
gracefully arranged in the first place. Think of a wallpaper, for instance. There is more repose in the recurrence of a pretty design at certain intervals than there would be if all the flowers of the ficld were turned loose upon the sides of the room. One merit of conventionality is that it restrains the redundance of untrained fancy, compelling a certain exercise of thought on one simple object.

More than this, the strict laws of decoration exclude effects of light and shade, for these imply seeing the subject always painted in one light. A picture painted with the light falling upon it from the left side should always be seen in that aspect. Now articles that are to be worn are constantly changing their position. If vou are wearing an apron painted with roses in high relief, with strong lights and shadows, you must sit always in a window, probably north, with lights similar to those used by the artist, and this would be tedious. Screens so painted would have to be always on one side of the room, and so on. The Japancse fully recognize this law of decoration, and this is why they attempt in decoration no such effects of light and shade. They rely for realism - that is, for making their subjects look like natural objects - on the delightful accuracy of form which characterizes their drawing; but their spaces are all'flat surfaces, not" shaded" as we say. For the same reason, they attempt little in perspective, beyond the ripple of golden threads for waves, and the like, as perspective effects depend upon the point of view. The art of conventionalizing flower designs is a pretty one, and may be easily
leamed with the proper text-books. Some simple symmetrical Hower is taken as a basis and drawn flat in ontline as it would appear pressed, scen in front, also in profile. The flat form of the leaf is also drawn, as it is shown in a perfect speeimen, the sides being the same. These details are then combined and repeated so as to agreeably occupy the space for which they are intended. The art is to impart sufficient grace to the design to avoid stiffness, without losing the symmetrieal eharacter of the parts.

In preparing any design, "unventionalizel" or not, the first care should be to decide the shape and size of the space to be decorated, but more especially the shape. As I have said before, the spaces not occupied are as important as the forms of the subject, and in making your design yon' must think of things that will prettily fill the space, without leaving too much margin, or too little, too much or too little interval between the parts of the design. The illustrations at the heads of these chapters will show you what I mean. The proportion of thirds is always agreeable to the eye; thus, a design may necnpy "about" two thirds of the allotted spaee. The distanee between two leaves may be "about" a third of the width of one of the leaves, \&c. If the rule of thirds were accurately followed, it would give an air of geometrie stiffness not desirable ; bnt with the qualification "about," it gives enough variety to have some of the spaces a little more, some a little less, than a third. Do not leave large areas of uncovered space; these may be filled or broken by hirds, butlerflies, or insects, if the design is of flowers. A small fly
will fill up a large sume if judiciously placed, as we all know he will, on a summer day, fill a whole house with injudicions buzzing.

The eye is pleased by constant changes from variety to symmetry. Too much symmetry leads to stiffness, which is ugly; too much variety is confusing and lacks repose.

The old plan was to put a group of flowers always in the middle of the paper on which it was painted. This is still sometimes well. If you want to ensure its loeing in the middle, make the distance on each side of the design the same; that is, if the shortest distance of some part of the design to the right edge is just the same as the shortest distance on the left sirle to the edge, it is in the middle; the same at the top and bottom. If your work professes to be in the middle, any slight deviation will make it look wrong; for this reason, when you do not intend it to be in the middle, put it well in the corner, extending either over about two thirds of the space, or over a little more than one third, with some detached object to break the empty two thirds. Do not overcrowd the space you are decorating, but let the vacant parts show evidences of thought and consideration, and not look as if left to chance.

## SELECTING DESIGNS.

To produce immediate results in painting without first learning how to draw, will require a substitute for the knowledge of drawing. This may be found in the "Transferring Designs" referred to on another page. These designs are intended to be used for transferring the outlines of a pattern to the material to be painted; they will not be exhausted by once using, but may be duplicated a great many times. They will not only serve as a substitute for a knowledge of drawing, but will be found equally convenient for those who can draw, as, after the design has once been prepared, it will require but a few seconds of time to reproduce it on any material, and repeat the process as many times as desired. After the outlines of a design have been fixed on the material, a very slight familiarity with colors will enable those who have not made art a study to produce creditable results.


## CHAPTER V.

## SELECTING DESIGNS.

I cannot, in this little book, go further into the subject of preparing designs from natual objects. My intention is rather to lead you to good selection than to teach how to make designs, although I hope you will learn in time to do so. There are now so many good patterns offered for use that it is by no means necessary to make your own, and you had better rather forego the glory of having originated a design, with the danger of making a poor one from want of knowledge, to devote yourself to the good execution of one you have selecter.

In selecting a design, do not, I must repeat, choose a subject becanse yon "saw one just like it that was 'sweet
pretty." " I want you to begin farther back. Let us start at the very root of the matter.

In the first place, you want to make a Christmas present. I am tempted to go still further, and ask why you want to make it. I hope it is not because 'she gave you one last year.' This is the worst possible reason, leading to the corruption of the pretty practice, to dreadful lists of perfunctory gifts, and general misery all round. Make your present because you love your friend, and want to express that feeling by some slight sacrifice of time and trouble, and exercise of taste. As for the money value of the gift, it is a question entirely apart from the subject. Very well, then; you really want to make your friend a present, and luckily there is a space in her parlor not yet decorated. I will not here pretend to say what it is, but hope you will try not to make her a fire-screen if she has already six.

Secretly discover the exact size of the place to be decorated, if it is a panel to be inserted, or the proper dimensions of the table-cloth, lambrequin, or what-not, and upon these consider the size and shape of the space to be decorated. and then search for something which is just suitable for that space. There are tall, slender subjects good for upright panels, - a continuous conventional pattern is suited to a long surface. Your mind, if you decorate much, and are familiar with many designs, will get the habit, when you see an empty space anywhere, of suggesting just the right design for it. The form of the design should be adapted to the place it should occupy. It seems foolish to say this, yet I have seen many bits of
decoration in which it has apparently been wholly disregarded.

The space to be decorated, I repeat, should be well filled, without much margin, so to speak, left moccupied, and these places unoccupied by design must be as agreeable to the eye as the design itself. This is too little thought of by amateurs. If you put a very small design in the middle of the space, there is nothing to occupy the eye in the empty parts, except the texture of the background. If, on the other hand, the design is too large for the space it is in, the charm of the background is lost, and the design looks crowded. When the material of the background is intrinsically beantiful, the design, it is true, becomes secondary. In this case, its color, shape, and size should all be subordinate to the material, and it may be put in the corner, or away from the middle ; but let it appear to belong in the corner, its lines adapting themselves to the right angle, while its contours penetrate agreeably the surface of the material. The practice of slight decoration has been rather overdone. One butterfly, or perchance an owl, "thrown on" to the corner of a large Turkish towel has become tiresome. You want to compliment the friend to whom you are giving the present with more thought, time, and trouble than this implies. However, individual taste must rule. I do not wish to dictate the extent of space your design must occupy, only to urge that you exercise due thought in deciding.

If you have, happily, made stadies from natural flower: during the summer, as Christmas approaches you have : portfolio of original designs; and it may be you have
studied how to "conventionalize" them. If not, seek, among Mr. 'Tilton's latterns, or wherever you can find them, something suitable and pleasing for your space. The shape is the thing you have to consiter, for you know fon can enlarge the design by drawing it as described in the last chapter. If you have not learned how to do this, buy a pattern suited in size as well as shape to the space rou wish to decorate.

In choosing the particular flower or figure to put upon the space yom are to decorate, taste and judgment must be fomr guide. For myself, I think our spring wild-flowers, for the most part, are not suited for decoration, in their natural state, and it seems almost bad taste to conventionalize things so unconventional. 'They are lovely to paint, for easel pictures, or for collections in a book. to be turned over, examined, and admired, for they require to be daintily painted, drawn, tinted, and modelled with great care and delicacy. For broad flat effects which will "carry" well, - that is, show to their best across the room where they are placerl, - rather large flowers are best, like poppies, single roses, iris, apple-blossoms. Golden-rod, from its rich color, has tempted the decorators of late: I think it has heen used too much; though its feathery racemes are showy, they are minute in detail, and the reckless swoops of yellow paint with which they are sometimes executed give no idea of the fine finish of their comntless flowerets. The sunflower is so big and gandy, it may be clone with a house-painting brush; but we do not care to see too many stmflowers about us, any more than we want all the garden to be full of them.

But in the whole world of beautiful hlossons, it is idle to give advice in a suall book like this. Choose your own subject for design, and in this be original as far as you can ; that is, in selecting from a mass of copies or patterns, be guided by your individual taste.

If the beauty of the material is the leading charm of your piece of work, be carcful to subordinate the design to it in color and form, as well as sizc, choosing these to enhance and sct off its texture and tint. The same good taste that influences you in the choice and trimming of your winter suit will aid you here, for the fundamental laws of harmony are the same for decorating a human being and a hand-screen. Do not fear, therefore to trust your own judgment in these matters. rather tham to imitate the ideas of some one else ; in the matter of design and form, on the other hand, lean upon some high standard, and train your own taste up to it.

Your design chosen, cut out a paper pattern of the exact shape you wish to decorate, mark round it on good paper a space exactly like it. Upon this draw the desigu, as faithfully as you know how, making it just as good as you possibly can in outline. You can, upon this, alter and adapt to suit the occasion. If you draw the outlines in charcoal they are easily brushed off and changed. Any design you have selected may require to be altered, enlarged, or diminished - at all events improved - by some different arrangements of the parts; but if you can find one just suited to the space, so much the hetter. When it is drawn to suit you, color it in flat water-color tints upon the white paper. Do not consider this a waste of time, it
will protect you from spoiling the work itself, which would waste not only time, but material. In this prelininary preparation you are becoming familiar with the subject. and you can change the plan of color or form as you gor on. Once finished, this water-color patteru of what you are to du should be implicitly followed. When you are working upon the real thing, yon have no leisure of mind to make improvements and alterations. The design should be mechanically transferred to the material to be used. by one of the methods here described, and the colors decided upon now, then implicitly followed.

Your own design may be best transferred by tracing paper, and red carbonized paper, when the surface is such that the traced lines will show, or you may use Tilton's transferring designs by these directious:-

Materfals. - The materials required are Transferming Designs, transfering powder, an implement for using the powder, and a box for the powder, etc. A limited quantity of powder is given with the designs, - more may be obtained from the publishers at twenty-five cents a package. The best thing to rub the powder on with is a roll of soft felt marle of an olll soft felt hat, cut in strips of about one inch and a half in width and rolled tightly. After being rolled and sewed together the ends will be meven, and it must be bumt down until the surface is perfectly flat and smooth. This can be done by putting it on the top of a hot stove and rubbing it every few minutes on some rough surface. When done it will be about one and a half inches high, and from one and a half to two inches in diameter. This, if properly made. will last a
lifetime. A more simple way is to use a cotton spool after tying two or three thicknesses of cloth over one cnd, and over that a piece of soft chamois leather.

For the powder have a box made, say six by eight inches in size, and about two inches deep, with the inside bottom lined with woollen cloth; partition off a space at one end to keep the powder in bulk, and have the compartment wide enough to admit the felt roll, - a common table plate will answer in plaee of the box, but the box will be much better, for this reason, - the best transfer can be made by using a very small quantity of powder. Dip the felt roll into the small compartment containing the powder, and then rub it over the cloth-lined bottom of the larger compartment ; this will distribute the powder evenly over the surface of the felt roll as well as rub it in, and will regulate the quantity used so as to give as much or little as may be desired.

Directions for Making a Transfer. - The transferring should be done on a smooth table. Lay the design on the paper or material to which the transfer is to be made, with the rough side up. One side of the design will be found perfectly smooth, while the other is slightly rough ; secure it in position with some heavy weight - a flat-iron will do, placed on the end, corner, or side, so as not to cover the design, - hold the other end or side down with the left hand, and hold it down so closely that no powder can get between it and the material; with the right hand use the powder. The best transfer on paper will be obtained by using very little powder, only so much as will give a distinct outline of the design; dip the felt
roll into the powder, then rub it over the cloth-lined bottom of the box, then rub it gently - not too gently -over the face of the design. If the directions given above for holding the design in place lave been followed, the unseeured side may be raised so as to see when the transfer has been perfectly made before removing it. 'This operation is so simple and easy that a very few trials will teach any one how to do it.

The design in this state will not be permanent, as the powder will easily rub off, but by traeing over the lines with a fine-pointed lead pencil, or pen and ink, as the ease may require, the powder may be dusted off and permanent lines seeured.

These designs can be used for needlework as well, in which event, after removing the paper pattern from the material, the powder should be fastened by going over it with a hot iron, having covered it first with a thin paper.

## PIGMENTS.

The following chapter explains how pigments or colors are prepared for the artist's use, the difference between transparent and opaque colors, and their adaptation for the various uses to which they may be put.


## CHAPTER VI.

## PIGMENTS.

The materials used by painters are prepared by various processes, - grinding, washing, or burning, - and applied by dilution with some liquid, which evaporates, or dries up, leaving the pigment, or paint, on the surface of the material, to which it has been applied, without change. For this purpose various fluids are employed; and the differences of the materials used, with the method of employing it, have given rise to the modes of painting in water colors, oil, etc.

Pigments may be arranged in two classes, opaque and transparent. The first are those which have great body, and which, when laid upon paper, silk, etc., cover the surface so completely as to efface any other color which may
have been previously applied. The transparent pigments, or colors, are those which leave the ground upon which they are applied visible through them, and so produce a color compounded of the two ; thus, a transparent yellow over blue produces green, etc.

Transparent water-colors are those which come in tubes. pans, or half-pans, the latter being, on the whole, most eonvenient. Mr. Tilton has for begimers a very handy box with ten pans of moist colors, enough for simple combinations, which should be learned first. The use of these colors is easily acquired, and forms a good basis of knowledge for painting in any medium. For painting flowers, and general decoration, a wider range of colors is to be desired, and a large box to hold them ; but it is very well to begin moderately with a set of paints that costs but little.

I do not here describe landscape painting in water color, practised in out-door sketching, as it has little connection witl the subject of decoration. Transparent colors in tubes or pans are best employed for this work, as broad washes and wet effects are produced to advantage by them alone.*

Tilton's Liquid Colors for Tapestry Painting are just as transparent as common water-colors, and, being very rich and brilliant in tone, are admirably adapted for decoration. Moreover, they are dyes, strongly mordant, and will

[^0]adhere to cloth, even when it is washed. This renders them excellent for broad, effective work on bed-quilts or curtains of washing material. Not that it will do to wash these things very often; I only mean that these dyes are more permanent than the delicate water-colors commonly in ase, which disappear by any drop of water which may fall upon them. These paints come in bottles, and are easily used. The only trouble is the inconvenience of transporting such liquid paints from place to place. Transparent colors are effective on any white or very light surface, where the whole design is to be darker in value than the background. As has been said, each color, as it is laid on, is influenced by the tint below it, just as colored glass or isinglass would be. Therefore, in painting upon textiles of a dark color, where light tints are to be laid upon a dark background, something else must be employed. For this Gouache, or Body Colors, are used, the basis of which is Chinese white, a thick, white paste which comes in bottles or tubes. It looks very much like oil paint, but combines with water instead of any other medium. The ordinary transparent colors may be made opaque by mixing with Chinese white. A very usual way of painting in opaque color is to lay in all the forms with a pretty thick coat of pure Chinese white, which forms an undertone on which the tints required may be laid with the common transparent colors in Mr. Tilton's box, or his liquid colors just mentioned. A more direet effect may be produced with the gouache colors, which, combined by the maker with Chinese white, are ready to be laid on in the tints required for the fimal effect. In this case, the first
undertone is made with the requisite local color of the design ; the modelling and markings needed to give it roundness and character may be put on with transparent color over the coat of gouache. The use of opaque colors is good practice for employing oil paints, which are to be preferred for some kinds of decoration. The latter are, upon the whole, the most troublesome of all pigments for processes outside their legitimate sphere, which is painting on canvas, - portraits, landscapes, or great works of any sort. To subordinate oil colors to the whims and fancies of feminine decoration seems unwise; but it is often done, and with good effect. The difficulty in managing oil colors on any delicate textiles, like silk or satin, is that the oil in them is apt to spread upon the material, and when it does to make an ugly grease spot. Turpentine, which is used to thin the colors, as water is in gouache or water color, is but little better. It is, unfortunately, almost impossible, in written directions, to describe exactly the amount of turpentine, or other medium, that may be mixed with these pigments without danger. Experiment alone can guide the dccorator ; and each different material must be practised upon. By painting with gouache colors before attempting any serious work in oils, you may make the process easier for yourself.

It is thus seen that there are two distinct processes of working required by the different mediums described, trausparent and opaque. In ordinary water-color painting, and that for which the Liquid Colors are used, only transparent effects must be sought. In opaque painting, either with Chinese white and gouache colors, or with oil paints,
no transparency can be looked for, but, instead of these, thick, solid effects of mass. Therefore, gouache painting and oil painting are more closely allied to each other than gouache painting is to transparent water-color, although water is the medium it requires. This distinction must not be lost sight of. If you are painting in pure transparent color upon a light ground, any touch of Chinese white or gouache will injure wholly your work. If, on the other hand, you are working in opaque color, use as little water as possible, and do not try for thin washes. It is still worse in oils to thin the colors over-much with turpentine or oil. Thin, transparent effects are best attained with water colors, and rich masses with oils.

These differences of medium bring about two wholly distinct methods of treatment, which you had better understand at the outset, in order not to confound them later, and work unsuccessfully, perhaps unconsciously, with both methods at once. In transparent color on white or light backgrounds, such as paper or light silk, the ground is the highest light. Any spots of white in the design are given by leaving the paper untouched by paint in the right shape to give the idea of that high light. The strongest illustration of this is the reflection of a window barred with the lines between the sashes, cast upon a dark glass surface. Suppose you are making a careful study of a glass vase or pitcher, upon which this reflected window is to be depicted. If you are painting in transparent color, the little picture of that window must be left without any paint upon the pure white of the paper, that it may tell with good effect by the brightness of the white paper
when it is eovered up elsewhere with colors. You have no power of giving brightness other than relying on this pure white of the paper for the highest light. On the other hand, in painting either with gouaehe or oils, you need not trouble yourself about the matter in laying on the color of the vase: but, when that is wholly dry, with white paint you will paint the reflected window. In this case, your difficulty will be to paint a tiny little window there (curved, probably, by the shape of the vase) just as accurately as you can. In the other case, working with transparent eolor, you will have to paint around a little shape like the window, left on the paper with color in the sense of a background. Your success, by the way, in both cases will depend upon the skill with which you render the form of the little reflected window.

From this matter of the lighest light arises the difference in the two methods. In transparent water-color you work away from the white down to the lowest dark of the shadows; in gouaehe and oils you may put on the darker parts first, and work up to the lights, your finishing touches being the well-executed, sharp flashes of white. In transparent water-color the finishing touehes, on the other hand, are the darkest, - little bright dark markings in the right plaees to define the very depths of a eorolla, or the stripe of a petal, -in general, the parts of the design farthest from the eye in the shadowy reeesses behind the nearer and lighter masses. In transparent color, if you lose the brilliancy of a high light with your first washes, it is useless to have recourse to a dot of Chinese white to restore it. Therefore, put your bottle of Chinese white as
far away as possible, not to be tempted to use it. Remember that all the tints are influenced by the white of the paper you are painting on shining through them. With a thick drop of white you destroy all hope of this effect. Opaque color dries dull, while transparent color grows brilliant as it dries, and thus the two methods have no sympathy with each other.

In all these different methods of working, and different mediums, the laws of taste for color and design are the same. I shall consider, as a basis for my directions, the use of transparent water-color, because these paints are, on the whole, the easiest for beginners to handle, and, begimuing in a simple way, the cheapest. In the directions for working on various materials, I shall describe the method for each of the mediums in nse, pointing out the advantage of one of them over another for one and another texture of stuffs.

$$
\cdot
$$

## COLORS <br> (PRACTICAL).

## Materials for Chapter VII.

Box of Water-Colors. Brushes. Lead-Pencils.

Paper or Paper Block. Two Tumblers of Water. Old Rags.

To be skilful in the use of colors requires a knowledge of their capacity ; that is, what can be done with them. In the previous chapter the reader is told how colors are prepared for the artist's use: the following chapter will tell how they may be compounded or mixed so as to produce various results.

It is a difficult matter for one who has acquired skill in the use of colors through long practice to explain in brief what has cost so much time and study to learn.

What confuses many who are unacquainted with the management of colors, is a scientific "Theory of Color" which cannot be carried into practice because we cannot obtain the materials supposed to be used in it; and many writers on color mix theory and practice in such a way as to make the practice of colors difficult to understand.

Science produces a theory in which there are but three primary colors; viz., blue, red, and yellow. In this theory each of these three colors is absolutely pure ; that is, blue is blue, with no mixing of other color or matter: and so with red and yellow. With these three colors, all other colors and tints seen in the works of nature are produced.

Although this theory is generally aecepted by artists, it camot be carried into practice beeause of the colors employed by the artist. None are pure. We find blues, reds, and yellows, but not one of them unalloyed with foreign substanee: consequently the artist cannot select any one of each of the blues, reds, and yellows at his command, and with them produce all known colors. If he will learn the nature and capacity of all of the different blues, reds, and yellows, he may be able to approximate Nature in her coloring. Any one with a good eye for eolors could at a glance detect the difference in color between flowers painted by nature, and flowers painted by the greatest artist who has ever existed.

Accepting the theory, suppose we could enter Nature's studio, and there hear an order given for so much red and so much blue: it would be a definite order, because there would be but one blue and one red. The same order in an artist's studio would be unintelligible: the question would be, Which blue? Which red? Consequently, while in theory there may be but three primary colors, there are no three colors obtainable in practice from which all other colors can be made, and the artist must have a wider range of what, for convenience, we will call primary colors. Some artists select but few, while others demand a larger number: perhaps ten will be a fair average. It would be next to impossible to say definitely what these colors shall be, because there are so many different blues, reds, yellows, and mixed colors, that several lists of ten colors could be selected from which practically the same results could be obtained. The following
ten colors we have found in more general use for water colors than any other list which we have ever seen : -

> Blues: Indigo, Cobalt, and Prussian.
> Reds: Crimson Lake, Vermilion, and Light Red. Yellows: Gamboge, Yellow Ochre.
> Mixed Colors: Vandyke Brown and Sepia.

These ten colors are in Tilton's Decorative Art Box No. 1. which also contains mixing directions, showing how they may be combined so as to produce any color desired.

We do not advise the reader to confine himself to these ten colors. After becoming acquainted with them, there are many others worth trying. Miss Hale has in the following chapter mentioned other sets of primary blues, reds, and yellows.

In regard to proportions in mixing, that is something to be lcarned by practice. The reader will find it quite an interesting study in trying to match colors found in flowers and foliage; he will be surprised by the endless variety found in the greens of nature. As this book is not intended to be a treatise on color, we will refer the reader, for further information on the subject, to "Artists" Colors, and How to mix Them."

In the matter of applying one color over another as mentioned in the following chapter, the reader who is learning will hardly succeed in his first trial, as it is not easily accomplished until after one has learmed the knack of doing it ; the difficulty to overcome is in laying on the second color without disturbing the first. This is not one
of the things which can be done without learning how; and as this chapter is to be instructive in combining and mixing, rather than in the application of colors, the reader may defer learning this part until later, unless he prefers to learn both at the same time. If the colors are mixed instead of applying one over another, the result will be practically the same.


## CHAPTER VII.

## COLORS, PRACTICAL.*

The three primary colors are red, blue, and yellow. Each of these is bright, pure, and clear in its own tint, which cannot be confounded with any other. There are different reds, blues, and yellows in all the paint-boxes. The experiments described here you may make with Prussian blue, crimson lake. and gamboge from Tilton's D. A. Color Box.

[^1]The secondary colors are made by combination of the primary colors in pretty even quantities.

Red and blue make purple.
Yellow and red make orange.
Blue and yellow make green.


Red is the complement of Green; BLue is the complement of Orange; Yellow is the complement of Purple. These colors are found opposite each other at the points of the star.

The two triangles of this cut illustrate this very well, and you will do well to keep the pointed star they form in your mind, for, though the rules of color seem simple, it is easy to forget them.

In good compositions of color some evidence of the three primary colors is always present. If red and yellow are present, the eye instinctively asks for blue; if blue and yellow are alone to be seen, some ingredient of pleasure is wanting, which will be found to be red. Thus Red, Blue, Yellow, may be regarded as a whole, incomplete without the presence of its three parts. Now the secondary colors, purple, orange, and green, each being made by combining only two prinaries, must lack the third element of completeness, and the third color, therefore, required to complete the whole, is called, in each case, the complementary color, or color necessary to complete the secondary color ; that is, to make a combination pleasing to the eye.

Referring again to my star, you will see that the points opposite each secoudary give its complementary color. 'Thus, opposite purple you find yellow; opposite orange stands blue; and opposite green, red. Now this is not a mere jargon of terms, as you might suppose, but a great help in making not only combinations of color, but mixtures of paints. This system of colors was discovered, not invented: that is, it was drawn from Nature, and there are plentiful illustrations of it in Nature herself. Everywhere you will find that the secondary colors are enhauced - set-off, made brilliant and effective - by being placed close to their complementary colors. The cardi-nal-flower flashes most brightly seen among the bright green of reedy grasses, in which it loves to grow. The yellow centres of asters are set off by their fringe of purple: and why should pale yellow butterflies flutter
over the great purple thistles, if their vanity did not assure them that the complementary combination was most ornamental to them? The intense orange tints of a clear sunset are much enhanced by the deep blue of the sky above, and the bluc of momitains below. And so on, the illustrations to be drawn from Nature of the harmony of complementary colors is infinite, and you will do well to seck your own examples. Look at the shadows cast upon a brick sidewalk when it is wet, and therefore bright orange color, and see if they do not appear decidedly blue.

It by no means follows that the proportions of the colors employed should be equal. A very little yellow, for instance, goes a great way; one touch of red lights up a whole ficld of green, and so on.

The practical use of this old discovery is not limited to enhancing the effect of colors by putting the right ones side by side. It is especially valuable in working with transparent water-color. You will find that the proper color to "shade" a primary is its secondary color, - and the reverse, -and will learn to detect these tints in Nature. The clark side of red is green; the dark side of yellow is purple; the dark side of orange is blue. If you look at my star again you will perceive that one side of it, where red, orange, and yellow are, is the side of light, while the other, purple, blue, and green, is the side of shadow.

You may make practical experiments with the three colors I have named, - Prussian blue, crimson lake, and gamboge, - at the same time getting a little skill in putting on washes.

Cover a block of good drawing-paper, wet all over with a small sponge, with little spaces marked out with a peucil, about au inch and a half square. The paper should be still damp, but not shiny with wet, when you begin to paint.

Fill some of the squares with a good wet wash of Prussian blue, some with crimson lake, and some with yellow. By the time you have tinted them all, the first will be dry enough to paint over. Put a wash of each color over one square containing each of the other colors. You will find now you have green, orange, and purple squares, as well as red, blue, and yellow ones. Take now one of the secondary squares - for instance the green oue -made of blue and yellow. The color lacking, i. e., the complementary color, is red. If you will wash over half of the green with red, leaving the other half green, you will fiud that you have depicted a space half in light, half in shadow. 'The pure green is the light side, the part covered with red has the requisite tint to represent that same green in shadow; in other words, with the light withdrawn, painted out by red.

Upon a purple square cover half with yellow. You will find this addition has given you the right tint for the parts withdrawn from light. So with the orange square ; blue will have the same effect.

Now prove the same thing by adding green upon half of a red square, purple upon yellow, and orange upon blue. The result is the same. Yon may make green with Prussian blue and gamboge, before laying it on, or you may lay on first Prussian blue, and, when that is dry, gam-
boge: the result is the same. To ensure success, mix the green, purple, and orange to contain pretty equal effects of each primary, - effects, not quantities, - for the power of pigments is very variable ; a very little Prussian blue turns a sea of gamboge green, and turns crimson lake into dark pmple.

Another experiment is prettier, and may be made on the same sheet of paper, if you have room enough between the squares. Draw lightly three rounded forms, like a cherry, an orange, and the petal of a buttercup. Paint the cherry with wet bright-crimson lake, and, while it is still wet, drop some bright green into the wet color on one side, for its shadow. You will find it spreads about on the wet color, in a pleasant way, giving of itself the gradations on a rounded surface. Allow more green to stay in the middle of the dark space than elsewhere. As it spreads, it will be more and more affected by the red, just as deep shadows are gradually influenced by light.

Paint the petal with pure gamboge (in a perfectly clean brush), and while still wet drop purple into a part of it. This dropping is done with a brush, pretty full, both of the same yellow needed for the first wash and some purple taken pure from your purple mixed on the palette. Hold the brush upright, and touch the surface of the petal lightly. The new color will run in of itself, and needs not to be stirred up on the paper, but left to spread and soften. One touch will probably be enough. Of course if you drop in too much purple you will change the whole and lose all the yellow. The orange may be rounded in the same manner. If your first mixture of orange lacks
red, the shadow tint wronght by dropping in blue will be too green; because blue and yellow make green, and red is required to keep that tint in check. The shadows of orange known in Nature are decidedly greener than those of yellow. Keep your colors pure, - that is, do not muddle the primaries in mixing them, even with their secondary combinations, - but, as far as you can, have the dropping into the wet place made on the paper with a fresh, pure tint.
'These laws of complementary color are most valuable, and you will do well to have the star which notes them before your mind's eye, at least. The shadows of yellow aud orange are often ill-executed, on account of neglect of this guiding star. There is a dictum that yellow should be shaded with "brown," which is perfectly true, for browns are but purples with yellow added; but the dictum is dangerous, for paint-boxes contain a great many different "browns," mixed with more or less yellow, which may be either too much or too little for your own tint. If you drop purple into yellow you are sure of fitting the right "brown," not the wrong one.

In pansies, Nature and cultivation together have playfully, one might say, rung the changes upon purple and yellow. Here are all gradations of the two colors blended, making rich browns where the purple is run into yellow, especially on the lower petals, just as it may be with the brush and good wet color.

The three pigments - Prussian blue, crimson lake, and gamboge - serve very well to illustrate the law of complementary colors and for practice in first washes, but there
are far richer ones in the range of the color-maker, which, lightly combined, make delicions tints. In the tubes and pans of the higher grades thesc are lovely. Other colors mentioned in the lists are equally lovely, but less transparent, and these I adyise you to avoid when you are making washes; they are useful adjuncts to painting in gouache, or body color.

After you have mastered the combinations of primary and secondary colors, you will be able to produce all the tints you require. Remember that red, blue, and yellow are the only pure colors, and that all other combinations are due to the different proportions in which these find themselves. The aesthetic shades, so much in voguc, and with good reason, - are but the old crude tints cnhanced by the increased proportion of some one of the primary colors. "Greenery-yallery" shades are described by their name; the brick-reds, called terra cotta, oldgold yellows, peacock blues, arc but modifications of the old primaries, only the old pigments are superseded every day by new paints, made through modern chemical discoveries. These combinations of color have been called "tertiaries," and so on, but it is not necessary to confuse the mind with arithmetical proportions carried so far.

Keep your palette simple, and do not mix up a quantity of tints, hoping for a lucky combination. This is especially important in oils; a dreadful mess may be made with brush and palette-knife, destroying all hope of freshness of tint. Whatever pigment you have chosen to use for the local color of your subject should be kept for its
complementary combinations. For instance, if you should hit upon carmine to paint a flower, use carmine again to gradate the shades of your greens, and use the same paints to mix these greens and to round the petals of the carmine flower. The carmine left in your brush after laying on the local tint of the petal will be just right to modify the green you intend for the leaves. All secondary tints are crude without a slight addition of their complement.not too much ; just a flavor, like pepper and salt in a good soup. Let that seasoning be what is in your brush, left from the use of that complement, and you will make harmonious combinations. That is, if you have been laying on a tint of pure, bright yellow, the color left in your brush is quite likely to be just enough to modify the purple, made of red and blue, which you need for romading the yellow. Therefore, while using water freely, do not wash your brush heedlessly, but consider whether the color left in it may not enhance your effect. The yellow of the stamens of a wild rose is a good yellow to put into the green of its leaves, - the rose-color of the petals will help the green, and, with a little green, will be right for the stems and thorns. The green, in its turn, will delicately shade the petals, and the darkest tint will mark the veins of the leaves, bring out one side of the stem, and give the finishing touches. Here is simplicity and harmony, and the result will be good. Bad would be (and often is) the result of painting the rose with lake, the centre with cadmium, using Hooker's green for the leaves, and shading them with "brown," i.e., some color taken at random from the box,-composed of
tints you know not what, very likely alien to all the others employed.

Every artist has his own palette; i.e., a favorite range of colors which he employs for effects. You will do well to make yourself familiar with the contents of your paintbox, and understand the composition of the different tubes, pans, or cakes it contains. Do not be misled by the names of the paints or pigments, for they often convey a wrong idea. Thus, "browu-pink," which you might think wonld be useful for dingy rose-colored flowers, is a warm yellow, good for combination with indigo in making greens.

As all combinations of color are made up of some red, some blue, and some yellow, you will do well to arrange your box on this principle, having all the reds by themselves, all the blues, and all the yellows, and this in disregard to their names, which, as I have said, are misleading. As far as possible, buy and use those pigments most nearly allied to the primary reds, blues, and yellows. There are paints made of combined colors ready for the artist; for instance, Hooker's green, Payne's gray, etc. Hooker's green is merely gamboge and Prussian blue put together. It is very bright, very crude. You will do better to avoid it, and to rely on making your own combination of blues and yellows. Payne's gray is a very pretty gray, but it is cold and neutral in tone, and, if used, needs almost always to be warmed up with a little rose, or brightened by a little yellow. It is not unusual to "sharle" yellow flower's - perhaps all flowers - with Payne's gray ; a sad mistake, as we have seen by the law of complementary
colors. "Gray," a vague term for all the combinations of red, blue, and yellow, in suitable proportions, can be made right to "shade" with, only by making it complementary to the local color it is used upon, which can be done by mixing it with the same paints which occur in that color. The gray made of cobalt, rose madder, and yellow ochre is suitable for the shadow parts of flowers painted with cobalt, because the orange (complementary to blne) made of rose madder and yellow ochre becomes gray by the addition of a little cobalt, or by the cobalt tint on your paper underneath the second tint. But Payne's gray has little in common with such a gray; it is made of indigo, crimson lake, and yellow ochre. The first two of these colors are coarse and heavy compared with the delicate tints of cobalt and rose madder, and therefore unsuited to be used with them, just as you would hardly think of trimming a soft, light summer surah of pale blue with navy-blue velvet ribbon. If you have no rose madder in your box, use crimson lake, which is the nearest to it. Crimson lake is almost too vivid for delicate grays and purples, but a little of it will answer, with cobalt and yellow ochre. The new greens, many of which are pure aniline pigments, cannot well be imitated by combining primary tints, and therefore may be used, especially in decoration, where we seek for brilliant effects rather than close imitation of the tints of nature. Many of them are opaque, and not, therefore, good in purely transparent coloring; one, however, transparent green oxide of chromium, is a bright, delicious green, and, varied by the addition of yellows and blues, very useful.

You must, however, establish your own palette, and make your own experiments of combined tints, following the laws of complementary color, and not trusting to the name of a pigment until you have tested its tint and classed it where it belongs, among the reds, blues, or yellows.

## COLORS <br> (THEORETICAL).



## CHAPTER VIII.

## COLORS, THEORETICAL.

It is easy to grow confused in mind about this matter of the primary colors, through the difficulty of finding terms to express ideas in themselves simple. Red, blue, and yellow have been named the primary colors, simply because these three are the only ones we can use to start with in making combinations of tints. We must starí with them, and, in fact, take them as we find them, because they are the only colors which will answer for secondary combinations. For instance, red and blue combined
make purple, but we cannot yet find any two colors which will combine to make red; blue and yellow make green, but green and purple do not make blue; yellow and red make orange, but we cannot, by adding any color, bring back the orange to yellow. Further, we find that, the more we mix and combine, the more muddy and far from pure tints are our combinations ; while, on the other hand, the closer we stick to blue, red, and yellow, and their simple secondary combinations, the purer and richer are outr effects.

Now this would be perfectly simple and clear, if there existed in Naturc or in any paint-box a tint or a pigment which could really be agreed upon as pure blue, another pure yellow, another pure recl. This is not the case; for there are many reds, many blues, many yellows. Nobody has any doubt about white, pure white (although, to be sure, it is seldom seen), and anyone who has bumped her head against a door in the dark has a tolerable knowledge of black; but if blue is mentioned, you ask, "What blue?"

The explanation of this is that nothing is perfect in this world. There is some alloy in the purity or completeness of everything, but no uncertainty, no vagueness. Take all the blues you can find in the colormen's lists, or, just as well, bits of ribbon cut from all the bluc ribbons in a large assortment. You may pick out of a dozen or twenty such patterns the one you consider nearest to true blue. This, of course, will be the one least like purple, and, at the same time, least iike grcen ; in other words, the one in which yellow and red are most conspicuously absent.

Study the other blues ; they differ from this one only in more red and more yellow than this one. What else could they have in them? What else is there for them to have? Their degrees of dark and light do not alter their tint.

There is an especially great variety in the reds, which range from purplish tints and those shown in "burnt carmine " through fiery scarlet to the verge of orange. But these modifications are all due to the presence of blue or yellow, probably both. Blue alone makes red into purple; but blue does not turn vermilion into purple, for the reason that there is so much yellow in vermilion that it counteracts the purple tendency. To make a good purple, therefore, select a red with but little yellow in its composition; for you want to keep the third element out of a secondary combination. On the other hand, to make a good orange, select a red without blue tendencies, for you want to keep clear of bluish effects in the orange.

The pigments, therefore, must be studied carefully, as I said before, to keep their true place in the scale of color, in order to be used rightly in combination, for they are all more or less away from the standard of their pure tints. If it were not so, we should lack the delightful variety of every conceivable grade of color, rumning from one into another till their lines are lost. It would be dreadful to live in a world of simple, primary colors, where everything was divided off into red, blue, and yellow, ummodified, like living inside of stained glass all the time, or sitting in the middle of a kaleidoscope pattern that refused to change. For the tints of Nature are alloyed everywhere. It is rare
to find a petal, strictly speaking, of absolute blue ; and, although we speak of the quantity of red flowers, there is a long difference between clovers and poppies in tint. This very lack of uniformity in the tints of Nature makes her charm. Therein lies the subtlety, so difficult to seize, which alone makes painting worth pursuing. Who would live in a world with a Prussian-blue sky, Turkey-red sunsets, and foliage of Hooker's green? But nature's tints are always pure, never muddled or vaguely combined.

It must be now secn that in calling the primary colors primary there is no attempt at setting these colors above the rest, or giving them any cxtra individuality. Green, purple, and orange are as pure, are as much colors as the other three; simply, for convenience in studying to combine tints, we must take, to start with, those that will combine. If green and purple would combine to make a distinct, good color, or if, by any accident, this color should be red, they could be accepted as "primary" colors ; but it is not so. On the other hand, purity and richness of color is saved only by adhering to the first tints with but slight additions of the others.

Especially in decoration, let reds, blues, and yellows be employed in pleasing contact with their complementary tints. These combinations will always be enhanced by the judicious addition of black or white - perhaps of both and of gold, which has a quieting effect, very different from yellow, at the same time that it enriches the colors near it.

## LIGHT AND SHADE.

## Materials for Chapter IX.

Charcoal or Lead-Pencils.
Stumps.
Cube.

Although this chapter is one for the eye and judgment, the reader may practise drawing both the cube and cylinder in different positions, also in painting the same in light and shade from the instructions given in Chapter VII.


## CHAPTER IX.

## LIGHT AND SHADE.-VALUES.

The term "values" is so valuable that it has come into general use, but it is not always, even when used, clearly understood. The whole matter of light and shade is a very simple one. It should be carefully studied by all anateurs as well as artists, for it underlies all effects of color as well as of black and white work. Charcoal is so easy a medium to work with, and illustrates so sharply the laws of effect in black and white, that it is now chiefly used in teaching about values of darkness and light, but
all the rules for its use apply with even more force to working in colors.

A cube painted white, which is held as the first model for students drawing from objects, is the best thing to use in iliustration. However, a square white pasteboard bandbox will answer just as well for this chapter, which treats only of values and not of form.


Place it near a window where the light will strike it upon the left, and where no other window is behind or on the other side. It must be on a low chair, so that you can see the top when you are sitting at a little distance, and it should stand on a platform of gray, and have a gray background. The junk-board on which drawing blocks are made is a good color for this purpose, and if you have two old ones, left after the blocks are used up, put one beneath the cube and the other behind it. This junk-
board may be had of any bookbinder. This exercise is one for the eye and judgment merely, so you will require no pencils or other materials, only have your wits about you. The front side of the cube is white, is it not? Mark that 1 in your mind, as the "highest light" "highest value," or "value No. 1." Now look seriously at the subject, which includes not only the cube itself, but its background, platform, aud shadow cast upon the platform. Which of these is darkest in tone? Probably the shadow cast by the cube. Mark this 5 in your mind. The top of the cube is the "value" next in lightness to the white side. Mark that 2. Probably the platform nearly matches this top both in color and value; mark that therefore also 2. The background behind the cube comes next. Make sure that it does by comparing it with the top of the cube. If the top appears lighter than the background, then it is 2 , and the background is 3 . The side of the cube is darker, - undoubtedly darker - than the background, do not you think so? Very well, then it is 4 ; and 5 , previously marked as the value of the shadow, comes now as darkest of all.

Here, then, are five values: 1. The highest light. 2. The second tonc. 3. The tone for the background. 4. The darkest part of the object. 5. The cast shadow.

As I am not sitting by you, I cannot be sure that these numbers will fall upon the same parts of your cube as of mine ; but that will be all the better, as it gives you some freedom of judgment. The thing is to seek then five different shades, and to recognize that, at least in this simple subject, it is enough to have five values by which
to represent them. Suppose you had the idea of working this pleasing design in worsted. At a shop they would show you, in Berlin wools, endless gradations of hue between black and white, very lovely to look upon; but you would not think of buying fourteen or fifteen different shades to work the design with. You would choose white for the lightest, black for the darkest, and certainly no more than three even tones between them, to represent the other parts. You might have six, in order to give the platform a separate shade for itself; but you would think it hardly worth while, as, on the whole, it would be more harmonious to have it the same as the top of the cube. Harmony also makes the difference betwcen one and another about equal from one to five. I mean there is about as much difference between 1 and 2 as between 2 and 3, between 3 and 4 , and between 4 and 5 . In selecting your wools you would endeavor to grade them harmoniously, so that the five would lie together with even differences betwcen them, like the rungs of a ladder, with white at one end and black at the other.

Moreover, observe that on the cube itself there are but three values: 1. The highest light. 2. The half-tone. 3. The deepest dark.

So that if there were but one gray wool in the shop about half way between black and whitc, you could get along very well by using the gray for the top of the cube, and the platform white for the light side, black for the dark side and shadow, and leaving the background white.

Now this is the long and short of the study of values in
their application to the subject of light and shade. Every object that the sun shines upon has at least three values: 1. Its highest light. 2. Its half-tone. 3. Its deepest dark.

No matter how many colors may be displayed, each and all of them must obey this law of values. To return to our shop, - all the shades of different tints upon the shelves are dyed in different values, the two extremes of which correspond to black and white, with many gradations between. If you wanted to work the cube in crimson, yon would choose five shades, pretty evenly gradated among themselves, or you could do very well with three if they were nicely gradated. If you were working a quantity of cubes of different colors, you would strive to have the highest lights all of about one value, $i$. e., probably the lightest you could find in the shop; and the darkest shade of each color you would wish to be as near black as possible, otherwise some of the cubes would seem to be less affected by light and shadow than others.

In looking at natural objects, then, you want to learn to detect the underlying lights and shades, which have nothing in common with local color. This is the reason why many teachers keep their pupils working in black and white until they are sure to have mastered the "values." To begin well, it is necessary to take a simple subject (and our cube is the simplest), and to place it in light falling from one direction only. Cross lights, from many different windows, confuse the values, and so confuse your mind; and out-doors, especially at noon, the light is so diffused that the values are difficult to detect.

The sharp sides and angles of the cube divide and define its values; but with round objects it is not so easy to distinguish them. To prove this, you have only to put any cylindrical form in the place of the cube, in the same good light, with the same platform and background. Let it be white for your first experiment. A round muff-box would be excellent. Here you can still detect the values, blended, however, into each other on the rounded surface instead of being sharply interrupted at the angles of the curve. You will see the highest light a little within the edge, the deepest dark of the object within the other edge, the cast shadow on the platform probably darker, and between the highest and lowest values gradated shades for 2 and 3.

In rounded objects we detect:1. The highest light. 2. The "half-tone," betwcen the dark and light. 3. The darkest part, and also the reflected light beyond the darkest part, where some of the light from the other side of the object is brought round to us by the curved surface. (This is, however, probably a little darker than the half-tone.) If it were very important to have the muffbox, worked in worsteds, very round, very soft, and perfect, you might buy the fourteen or fifteen gradated shades between black and white to work it with. So in painting on romded surfaces, the values may be blended into each other with all the skill and delicacy you have at command; but take care not to lose the values in blending. If your darkest tint runs into the half-tones, you have destroyed the balance of values; so also if you lead the half-tone over the highest light. It is becanse charcoal is
so easy to manage that it is useful for studying values; to make a rounded form you may cover it all, first, with a flat value, No. 2. Then overlay the darkest part with No. 3, and take out a place for No. 1, with bread or a clean stump. There are two faults in the management of values, both extremes to be avoided:--.

1. That of having too few, and keeping to them so rigidly as to make everything you draw look like the cube, as if it were chopped out with an axe This has the merit of showing you have considered the vaiues, and made them right as far as they go, but is scarcely pleasing. 2 . Of losing sight of the values, even were they once established, in the effort to soften and round, and vie with Nature in delicate gradations; thus your work loses you the credit of knowing anything about the matter, and you please no better than the other.

The whole subject of light and shade is less important in decoration than in other artistic work, because flat effects, $i$. e., without shadows, are best for decoration. The use of good values gives relief to the objects represented, and makes them stand out like real ones from their background. Real things could not stand out distinct from others behind them, were it not for the variations of light and shade upon their surface, as you may see in any out-doors scene when a broad sunshine inundates it. If you are so placed as to see no cast shadows, you can scarcely distinguish fences from roads, or pumps or carts from the houses behind. On a decorated surface you do not care particularly to have the design look raised up, in relief, and especially you want not to have
the shadows of it fall in one set direction, for this would always be wrong on one side of the room.

In decorating, therefore, we rely on the effect of flat surfaces imposed upon contrasting backgrounds ; but it is necessary to talk about values, and to understand what we are talking about, in order to regulate high lights and deep darks The term "local color" is also a useful one. It means the actual color of any object unaffected by bright light or deep shadow. The local color of a wild rose is pink, the local color of a dandelion is yellow, and these terms may be more closely defined. Bright light has the effect of liding or removing the local color it strikes upon, as is secu conspicuously in the reflected lights upon the iris of the human eye or the windowpane I have before referred to, reflected on dark glass. Thus the highest valuc most effective is pure white, or white very slightly tinged with yellow. On the other hand, the local color is wholly lost in the very darkest part, and influenced by the darkest value as it gradually emerges towards the light. Therefore the local color of any object must be sought, and will be found, between the highest light and the darkest tint; and when I speak in this book of the local color, I mean the tint so found, unaffected by shadow and unextinguished by bright light, more simply what we all call the "color" of anything.

## WATER COLORS.

## Materials for Transparent Water-Colors.

Pencil No. F.
Box of Water-Colors.
Brushes.
Rule or Measuring-Card.
China Slant.
Drawing-Board.
Block of Paper.

Sponge.
Blotting-Paper.
Thumb-Tacks.
Old Rags.
Two Tumblers of Water.
Gelatine.

All of the articles enumerated above may not be called into use in this chapter, but will be required later, in Chapter XV.

In Chapters VII. and VIII. instructions for combining and mixing colors have been given. The object of the following chapter is to teach their application. Expensive materials will not be required for any practice-work: the same box of colors, a No. 7 camel's-hair brush, and a block of log-paper, will be suificient. The block of paper ( $10 \times 14$ ), referred to in Chapter X., would cost about $\$ 1.70$; the $\log$-paper, which is much less expensive, will do quite as well to begin with.

There are several colors mentioned in the same chapter, which will not be found in the "Decorative Art Color Box." These will not be absolutely necessary in learning how to
use and apply colors, as the box contains mixing directions for making any combinations required for that purpose. It will be a good plan, however, to have the extra colors mentioned, especially if the reader wishes to study the effects of new combinations; with one exception, they are what are called "extra colors" (so called from their ligher cost). Some of them cannot be successfully imitated, as has been the case with the colors in the box: for this reason, such colors as Rose Madder, Indian Yellow, French Blue, etc., should be the original productions, and not imitations, if they are to be used to test their capacity.

In this connection perhaps it will be well to explain the difference between what are called common (low-price) and extra (high-cost) colors. The difference in price is not that one is a superior quality of the other, as many might suppose, but is in the value of the material from which it is produced. The cost of a color is no indication of its value to the artist: viz., of the yellows, gamboge is a lowprice color, cadmium is expensive; the reason being that one is easily obtained in any quantity, while the other is a scarce article ; yet gamboge, the cheaper color, is the most useful; in fact, in water-color painting it will be found quite indispensable.

In forming combinations, i.e., mixing, a green produced from a mixture of French blue and Indian yellow will be quite different from a green composed of Prussian blue and gamboge, and for some effects be much better Each combination supplies a different demand, and neither will take the place of the other; but the principle of applying colors which is here intended to be illustrated can be learned
just as well with the common colors as with those of higher cost.

Although in painting on silk, velvet, and other textiles, wet washes will not be used, some such practice with colors will be clesirable for general information in their handling and management. Whatever is learned from this employment will aid one in acquiring a knowledge of any style of painting, as well as in mixing and combining colors.

After learning how to lay a flat, even coat of color, the practice may be extended with advantage to "Outline Designs" of flowers and figures, which can be obtained especially prepared for such practice with water-colors. They may be had in books, or on cards and panels, with directions for painting, and rules for mixing colors.

The "Transferring Designs" can aiso be used for the same practice: indeed, we think that those who intend using these designs, instead of relying on their own skill in drawing, will find it a great help to first make a transfer of the pattern which they intend to paint, to paper, and paint it with water-colors before attempting to paint it on more expensive material.

## General Remarks on Chapter X.

As this is the most important chapter in the book for beginners, we will offer a ferw suggestions in the hope of saving trouble and expense in useless experiments. Although we clains to teach how to paint on silk, satin, etc., it is not to be expected that those who have had no experience in painting will commence with practising on such
expensive material, and the following chapter has been written as preparatory.

In the first place, follow the directions, that is, if you intend to hold us responsible for any failure. We have not the space to give in detail the reason for everything directed; but there is one, nevertheless; for instance, we advise the use of a number 7 brush in the practice of laying smooth, even tints of color. Years ago, watercolor painting was taught with a comparatively dry brush, while to-day it is taught with a very wet brush. You are told in the following chapter to fill your lrush full of color, begin in the upper left-hand corner, painting from left to right, pressing lightly, so as to squeeze out the color as you carry the brush along. This will leave a little pool hanging on the lower edge; now, when you carry the brush back to the left side again, it must connect with the pool left after the first sweep of the brush, which will join and run into it, forming a new pool a little further down on the paper. This pool is to be carried down by continuing the process and adding more color from time to time, being sure not to exhaust all of the color in the brush before taking up more, until the entire space has been covered; then take up the color, if any is left, as directed. When this is dry it will present an even tint of color.

Now suppose you do not follow directions, thinking, perhaps, that one brush is as good as another; and as all beginners seem to have the idea that a small brush is easier to work with, try that; you will find that the color will dry as fast as you can lay it on, but you won't mind
that as long as you imagine you are following directions. When the lesson is finished it will be anything but a flat, even tint, because, every time one band of color dries before being joined by the next, it will leave a streak. There is no objection to the pupil's trying both ways, and if he finds the results as we have stated, be satisfied to continue and follow our directions until he has had practical experience sufficient to enable him to invent some better way.

There is no mechanical method for laying a flat wash; it must be learned by practice in the way directed by Miss Hale. Other information on the subject may be found in "Introductory Lessons in Drawing and Painting in Watercolors," by Marion Kemble.


## CHAPTER X.

## TRANSPARENT WATER-COLORS, OR MOIST COLORS.

In order to use transparent colors effectively, a good deal of practice is required in wet washes. This practice is very good for acquiring skill in the use of any sort of color with the different mediums, and it is therefore well to begin herc in our practical lessons. If you are beginners in all Art work you will do well to try some preliminary practice of this sort before attempting decoration upon any material; for working upon silk, satin, or any textile with the brush presents enough difficulties even after the first awkwardness of handling colors has been overcome. Meanwhile, as you practise transparent washes, you will at the samc time become familiar with various colors and their combinations, applying the laws of color given in Chapters VII. and VIII., and will moreover lay the foundation for painting in water-color in its higher branches, - landscape from nature, the realistic 'rendering of flowers, and objects, figures, even portraits, from life.

It is generally conceded now, I bclieve, that water-color is the simplest of the methods of painting, in convenience and lightness of materials, and the most difficult of all to bring to perfection. The extreme rarencss of the best works in water-colors may well discourage amateurs from embarking upon so difficult an enterprise as thoroughly acquiring the art; on the other hand, the beginning is so easy, that many find themselves launched and away; afterwards the employment is so attractive, and each wave carrics them so little farther, that they find themselves, before they know it, in deep water.

In detail, there are many points that rccommend watercolor in preference to oils. The smell of oil and turpentine is absent; watcr, if upset, creates only the confusion of a moment, and leaves no serious consequences. The box of colors is compact, and a block or drawing-board comparatively liglıt. Then, too, the process is shorter. A watercolor may be completed or spoiled in a couple of hours. The washes dry rapidly, and may be overlaid without delay, whereas oil pictures must be left to dry, to be resumed on a subsequent occasion. Besides, a bad water-color, a total failure, may be torn up and thrown in the fire on the spot, and all evidcnces of its existence removed; whereas an oil painting, the worse it is, the longer it survives, it would almost seem; for dreadful blotches of untrained beginners are constantly turning up from quiet corners to which they have bcen relegated, to the despair of their perpetrators. Oil-canvasses, to be sure, may be painted over and over, as the surface grows better when overlaid with paint. All these things are in favor of water-colors.

Though the beginning is easy, it should be carefully learned; for if the first steps are not taken faithfully, and with much repetition, no good will follow as the work becomes more difficult.

Wet your block with a sponge, always, as soon as you have your materials collected, ready to begin. This will make it, probably, just dry enough by the time you are ready to paint. It should be damp, but not so wet as to be shiny when turned towards the light. Rule spaces the size and shape of a postal card by marking them with a pencil all over the block. There will be room for six on a $14+10$ block, leaving a little margin for each.

With a good large lorush that has a nice point, filled with water, transfer plenty of cobalt from the top of its pan to the palette connected with the box, or a china slant, and keep dipping water from the tumbler to the palette, and adding cobalt, until you have a pool of pale blue. At the very outset learn to transfer water to the palette without discoloring the whole tumbler with bluc. This wastes the color, and is quite unnecessary. Do not shake the brush round in the water, but dip it in and swiflly withdraw it filled. Have the palettc close to the tumbler. Put something under your drawing-block, so that it may be slightly inclined; the top should be an inch or so higher than the bottom.

Fill the brush with this pale color, and cover one of the spaces, beginning in the left-hand upper corner and painting from left to right, pressing lightly but firmly on the brush, to squeeze out, as it were, all the color it holds. Paint along the pencil edge at the top with the point of
your brush, and then lead the color in a broad band across the upper part of the space, shaping the comers well. The color should be laid on so wet that a line of wet drops, a continuous pool of blue, hangs on the lower edge. Refill your brush, and begin again on the left, just below the band of color, touching this pool with the point of the brush, but not stirring round in it. The color of itself will join your new color and run down into it. Paint across another broad band of blue, always joining the last lightly at the edge; and so on until you have arrived at the bottom of the space.

One of two things is sure to happen. Either your color will give out and you will be streaking over the paper, trying to make both ends meet, or there will be too much when you reach the bottom, and a long puddle of blue langing over the edge of the lower pencil line.

In the first case, do not fear to mix more color, for there is no hurry; if your tint is not enough on the paper, you can prepare more by dipping water and adding cobalt from the paint. You will be wise, however, to mix a good deal of color before beginning, so as to have enough. In the second case, when the bottom is reached, dry your brush a little by passing it over the damp sponge, and you will find it empty enough to soak up the superfluous color, so that you can lead it about and fill the corners accurately and well. One object of this lesson is to practise filling the space close up to the edges, without going over or leaving them jaggrd; in flat decoration, later on, when you have irregular surfaces to cover, you will be glad of all previous practice. If the color has run over at the
bottom, and seems inclined to go coursing down the block, seize a piece of blotting-paper and lay it on the block, with the straight edge along the lower pencil line, the rest of the blotting-paper below. Press it firmly down with your hand, as you would to dry a signature, and it will take up the color outside the space and leave a good line.

Try, however, to make the color arrive where it shonld without the use of blotting-paper. Practise laying on flat tints until you can master the wet color flowing down the space. It is not well done unless the space presents a perfectly even surface of one tint, exactly as if cut out of colored paper. You may fill some of the spaces with yellow ochre, and others with rose-madder, and with these three tints enforce your knowledge of the complementary colors, by overlaying one tint with another (after the first wash is dry), and by putting one half the space in shadow, by the addition of the necessary complement.

This should impress upon your mind that cobalt, rosemadder, and yellow ochre belong together for one range of primary colors and their combinations. The purple made of rose-madder and cobalt is delicate and tender, suitable for hare-bells, pale violets, and the like. A little yellow ochre in the purple will make a suitable shadow-color for such flowers. The three together make the softest of grays, much used in landscape for cloud-shadows, and far prettier than Payne's gray for all the gradations of delicate white. You may of course make it warmer with rose, cooler with cobalt, brighter with yellow; with enough yellow you can make any "brown" you like. I put "brown"
in quotation-marks because, as generally used, it is such a vague term, betraying generally a vague idea in the mind that lays hold of it helplessly. Vague ideas are not good in painting. If you do not know yourself exactly what you want to depict, how can you convey an idea to other pcople?

Flat tints once mastered, you may try gradating; and for this, unless you have spoiled the sheet of paper you have been using by rubbing or some mischance, it may be washed off with plenty of pure water running from the faucet, and the sponge perfectly clean.

The process is the same, only as you go down the space dip the tip of your brush in water, but keeping the top of it full of blue at the same time, and with this paint the second stripe across the space. The third has more water, and the lower part should be done with pure water, the faint remaining blue in your brush shaken out in the tumbler. If the color flows well down the space, a gradated effect will show itself, darkest at the top, colorless at the bottom, without any streaks or lines of demarcation between the grades of tint.

Now repeat these, only narrower, so that pure water appears about a thind down the square. Into the very wet long pool at the lower edge paint a stripe of yellow ochre. The pool will affect the first of it so that it will be very pale, but the second stripe will be darker, if your brush be full of good, wet color. Stop using yellow ochre before you get to the bottom, and, without washing your brush, complete the space with rose-madder. The yellow ochre pool will rua into the rose, also influenced by the yellow
left in the brush; so that not pure rose, but orange made of it and yellow, will appear on the paper. These effects of wet color, blending themselves upou the paper without any preliminary stiming together on the palette, are the clearest and most beautiful of water-color effects. The one you lave now made suggests a sunset sky, and this process is among the earliest acquired in landscape practice. You may need in decoration gradated backgrounds prepared in exactly this manner; and you will do well to practise long upon the three processes just described, not allowing yourself to be satisfied with anything short of perfection.

Another set of primary colors which belong together is the one of Prussian blue, crimson lake, and gamboge, with which you studied the laws of complementary colors. If you paint a gradated square with these three, you will see for yourselves how much more vivid and pronounced is the effect of these colors. The former set makes tints suitable for delicate backgrounds and delicate flowers; this one is better for the local colors of flowers upon light backgrounds. As Prussian blue is a violent, disagreeable color, with moreover a bad reputation for fading, indigo is better to use with this set, although Prussian is more vivid. Indigo and gamboge, with a little crimson lake, makes a suitable green for leaves and stalks, and the green so made, with enough crimson lake added, makes a suitable "brown" for the trunks of trees, and woody stems. French blue, carmine, and Indian yellow, are three primaries still richer than the last I mentioned. The two first make a rich purple, good for pansies; Indian yellow added
in greater or less quantity makes the right shadow color for purples, and gives all the gradations of "brown" needed for their infinite variety.

Many of the large, yellow flowers so good for decoration - sunflower, rudbeckia, corcopsis, and so on - may be painted with Indian yellow, shaded and enriched with the same purple made of French blue and carmine. There is a pigment, violet carmine, very rich and delicious in a velvety effect, for purple petals; and the aniline colors, mauve and magenta, are needed for certain rich tints. Neither of these should be used just as it comes from the pan or tube; but modified, to match the petal imitated, with red, blue, or yellow, the delicate ones for delicate tints, and strong for rich effects.

There are other paints in the boxes and lists of colors, useful to have if properly cmployed. Light red is a good and effective color, very different from crimson lake, from containing so much yellow effect. For this reason it may be regarded as a secondary color (orange), and so used in combination with blue alone, itself furnishing the red and yellow. Thus light red and cobalt makes a lovely gray, good for all occasions when a ruddy gray - like a suntinted fog - is wanted; light red and French blue make a good color for old wood fences, tumble-down houses grown gray with exposure. In these combinations one pigment, i.e., light red, furmishes the red and yellow both. Most of the browns in pans and tubes are secondary colors by nature, if not manufactured; you may use them all, if you like them, with the addition of some little blue, yellow, or red, to make them truly complement the bright
color they are to go with, but do not use them without consideration.

Vermillion, scarlet lake, and similar reds, made of lead, are quite likely to turn black in time, and sometimes soon. They are also opaque and chalky, and it is better to avoid them. Carmine and Indian yellow combined make the richest possible scarlet, and most red petals can be made intensely brilliant by some gradating of more or less yellow with more or less carmine. A little brown madder, or burnt carmine, for the deeper tints, make a delicious range of reds, which should be shaded with green dropped into the wet color. Carmine has a bad reputation for fading, but it will last long enough for decorated textiles which are evanescent in themselves.

## LIQUID COLORS.

Materials for Liquid Colors.
A set of Liquid Colors, Poonah Brushes, Camel's-Hair Brushes, Paper for practice work, Cloth for practice work.

Liquid colors are in reality water-colors: they differ from what have already been described under the name of water-colors in the coloring-matter, which, instead of being prepared from pigments used for artists' colors, are made from colors used in dyeing. They are not intended to supply the place of artist colors, but in painting on tapestry and other textiles they will be found more permanent than the regular water-colors. What we mean by permanent in this connection is, that water will not cause them to run: they may be even moderately washed without destroying the colors.

The method of using "Liquid Colors" is the same as has been described in Water-Color Painting.


## CHAPTER XI.

## LIQUID COLORS.

Tapestry painting, which will be described later in this book, is really dyeing with mordant colors by scrubbing liquid color into the textile made use of, so that the material receives and absorbs the tints which become a part of it. The dyes are so strong that when once dry they cannot easily be removed; and, even while wet, it is troublesome to wash out spots made by mistake or accident. The process has been called tapestry painting, be-
cause these colors have been used to imitate old tapestries, and thus they were brought into notice; but the dyes employed in the process are so rich in tint, and so desirable on many accounts, that they are likely to become very useful for decorative work. They are colors of great tenacity, and are very easy to manage, as they combine readily with water, and may be used just as trausparent water colors are. In fact, they are deliciously transparent. The objections to them are, first, the troublesome form in which they are by necessity put up. They come in glass bottles, not casy to transport, and they must be kept tightly corked when not in use. The corks are always breaking, the bottles are liable to upset, and, as their contents are mordant dyes of a violent nature, the results of au overflow are disastrous upon carpet or table-cloth.

Nevertheless, they are coming into use rapidly; and somebody must invent a more convenient way of putting them up, to avoid these difficulties. These colors deserve to be placed next to water-colors, as the method of using is almost precisely the same as theirs. The tints are so bright that they are even more vivid by artificial light than in the daytime; this makes them desirable for decorations which are to be seen in the evening as well as at other times. Their permanence, however, is what gives them the chief advantage over ordinary water-colors, which disappear and run at the approach of water or dampness. In combination with embroidery, charming effects may be produced. Curtains and bedspreads of washing materials are painted in natural colors of flat designs, the outlines of petal and leaf being defined by "outline" stitch in
colors closely allied to the tints employed in painting with the dyes.

To use the colors in this way requires but little skill beyond a general knowledge of transparent water-color, as the outlines are to be made by the needle, and ordinary care will be sufficient to ensure the complete filling of spaces, and to avoid the over-spreading of color beyond these outlines. The brushes called Poonah brushes, or scrubs, are the best for scrubbing in the dy.e. A separate one should be kept for each color; for this reason, as well as others, it is better to limit your subject to a range of a few colors. A china palette divided into square spaces is convenient for holding the different tints. Pour a very little of each tint you are to use into one of these shallow squares, not more than you want at the moment, as the color is injured by exposure to the air, and therefore wasted.

Yon had better practise on something of no importance before risking the now method on valuable material; therefore, for experiment, try some effects first on your drawing block. The paints work very prettily on paper.

Damp the block as before for the lesson in Chapter X., and draw carefully upon it some simple forms of flowers and leaves, and then practise scrubbing in the color with the stumpy brush. It must be dipped evenly into the shallow palette, lifted from it full, and set down square on the surface to be tinted, then scrub it round in the space, leading the tint carefully up into the corners. The only trouble about the process is doing this with such a clumsy brush; and you may take a better-pointed bristle brush for difficult corners, only do not relinquish the serubbed
effect. In this process the color is not to be laid on, but rubbed $i n$. Leave every part of the design that is to be white untouched, and rub in the lightest shades of each color first, using a separate scrubber for each. ,The colors dry fainter than thcy appear; therefore, though you may freely dilute them with water, do not make them as light as the tint to be matched. Scrub the color well in, and do not attempt any gradation of tone, but apply the lightest color in a perfcetly flat tint; but you may scrub another layer of the same tint on the first, while it is still wet, which will give a second gradation of tone, with softened edges. By doing a block full of small squares, you will get an idea of the different colors, which do not all, in the bottle, look as they do on paper, eloth, or canvas.

Next, try the same process with any of Tilton's outline flower-designs. They look very pretty tinted in this manner, and this will give you practice in handling the scrub-brush. This must be held upright, at right angles to the paper you are working on, which had better be laid flat on the table, for, you see, the flat bottom of the funny round brush must touch equally the surface, as if you were ironing the material with a little rose-colored flat-iron.

Have ready a piece of strong cotton cloth, damped and stretched on the frame of a drawing-board, or, better, on an embroidery frame. This is to be a sort of sampler, or "try-piece." Mark it out with squares, or spaces, as in Chapter X., and prepare within these a kind of palette of color; that is, rub in different colors upon the separate squares. Put over these washes of the same tint repeated, or their secondaries, making your own observations as to
the quantity of color to be used. You can refer later to this palette, and judge from the most successful parts how to proceed with your final piece of work. Do not attempt too much of modelling and gradation, but select a design to be filled with flat tints as far as possible.

You had better repeat your first designs of flowers and leaves on some "try-piece" of cloth ; then your mind will be free from anxiety as to the result, and you can store up experiences for future work.

When the flat tints are in and dry, - unless the work is to be finished in embroidery, - go over all the outlines with a sable brush, and paint in the small details, such as stamens of flowers, veins of leaves, etc., just as you would in any other painting. The outlines may be made in the colors of the part they run round, or marked in some dark color, even black, if you like. If the tints are perfectly flat, the latter way is the most effective; if anything realistic has been attempted in the modelling of the petals and leaves, a dark outline should be avoided.

On cloth, you had best confine yourself to simple, flat tints of color, outlined with a dark, clear line. On draw-ing-paper, however, you may paint just as you would in moist colors, as well as you know how, selecting flowers of the most brilliant hues, to give a clance to show the bright, rich tints of the colors. They come out with great vividness in the evening, and are good, therefore, for fans and screens likely to be displayed by candlelight. The last touches are best made with ordinary moist colors.

GOUACHE COLORS.

Materials for Gouache Colors.

A Set of Gouache Colors, or Brushes, Sable or Camel's a substitute, as described in the chapter.
Brushes, Hog's-Hair, Nos. 1, Palette-Knife.
$2,3,4$.

Hair.
Blending-Fluid.
Drawing Board or Frame.

## Gouache Colors.

What has been said in previous chapters, by way of instruction concerning the application of colors, refers more particularly to transparent colors; that is, colors which do not hide or conceal the ground or material on which they are used, but allow it to show through them. This style of painting, which may be called the legitimate watercolor painting, of course appears to the best advantage on white or colorless grounds. In the following chapter we come to opaque colors; that is, colors which do lide or conceal the ground or material upon which they are used: consequently they may be employed in painting on colored grounds, such as silks, tinted papers, etc.

The general management and application of gouache colors is quite similar to oil-colors, so that those who learn transparent and opaque water-color painting will experience but little difficulty in painting with oil-colors, or in fact, colors mixed with any medium.

In painting one color over another with gouache colors, care must be taken not to disturb or mix with the under color. There is a knack in doing this which can only be acquired by some practice.

The instructions for combining and mixing colors, already given, will apply to gouache, oil, and colors generally.

The reader may practise on any scraps of colored silks, satins, or tinted papers. Plain wall-paper, which is quite inexpensive, will also answer; it can be had of any color.

Those who prefer to draw their own designs may draw directly on the material, or make use of the "Transferring Designs." If the latter are used, and the painting is to be done on silk or satin, it will be a good plan to try it first on paper of the same color: this will not only be good practice, but will enable one to see how his design will look when completed.

Glazing, a word frequently used, is explained in the list of technical terms.
-


## CHAPTER XII.

## GOUACHE OR BODY COLORS.

Sets of gouache paints may be bought in bottles or tubes, all prepared for working in opaque color. The word is a French one, and commonly applied in English to opaque, in distinction from transparent water-color. Except that the medium with which it is applied is water, it is more closely allied to oil-painting in the method of working it. It may be said to have the merits, or rather, perhaps, the defects, of both methods.

Bristle brushes, like those employed in oil-painting, are the best for painting in body color, especially for the first tints. The color in the bottles is thick; it should be taken out on the point of a knife, and mixed on the palette with a palette-knife (an old case-knife will do), with water, to a smooth paste. Tilton's Blending Fluid is
softer and better than water as a medium for gouachecolors, especially for painting on textiles, and you had better have it, although you ean learn to do without it. It is to be used instead of water to thin the color, water being used still to wash out the brush when changing the color. It is very well to have two or three brushes, one for each range of color. These will be enough if you keep your seheme of colors simple, that is, limited to two or three. The proeess of laying on opaque eolors is just the reverse of that used with transparent color. Opaque eolors are best employed on dark backgrounds; thus it is impossible to get high lights by leaving the natural tint of the paper or other surfaee. Probably all the values but the darkest are lighter than the background, so that they must all be laid on with the paint.

For practiee the brownish-gray board left when a bloek of drawing-paper is used up, is very good, which I recommend as a baekground for the eube in Chapter IX., i. e., bookbinders' or junk board. The neutral color is agreeable as a background for brighter tints, and the surface is good. Draw some design upon it, taken from Tilton's collection. You had best have a subject already colored, to imitate, - a Christmas eard which pleases you will answer perfectly well. With a small, flat, bristle-brush lay on the first tint, all over the flower-petals. This tint is not the highest value, as I have just said, nor yet the darkest, but the half-tint, or local eolor. If the thin liquid you have prepared with the Blending Fluid is not light enough to match this tint, add Chinese white, mixing it smooth and even on the palette. It should be quite liquid,
not pasty, and free from bubbles, which come in it if you stir it up too violently with the palettc-knife. Do not stir it with the brush at all. Lay this all on the flower, and, while it is drying, paint the leaves, in the same way, with another brush, and greens prepared by mixing the color with a few drops of Chinese white, and Blending Fluid.

The color will sink in, at first, in drying, and disappoint you. In time you will learn to mix it in just the right thickness. It should not, however, be too thick in this first layer. If the effect is semi-transparent, with some suggestion of the under-tone of the gray board shining through, it may have a pleasant effect of transparent shading, and help the next process, which is modelling the flower with a shadow tone made according to the rulcs of complementary color, with common transparent watercolors, out of your ordinary box, laid on with a sable brush, upon the dry surface, or under-tone first prepared. Paint lightly, not to stir up the opaque color bencath, and model your flower with clear forms; that is, define the lapping over of one petal on another in a good shape, that will leave the under-tone in a good shape also, to express the varied surfaces of the petal. Leave it to dry while you model the leaves. The stems should be put in with some green.

If now the color of the flower does not please you, on account of drying too light, or sinking in too much, yon may glaze it lightly with transparent color ; that is, lay a thin wash of whatevcr color will bring it back to the desired local tint. This is to be done with moist color, and a sable brush. Repeat the same on the leaves. Prob-
ably the darkest tints may be also now painted with your moist colors, and softencd or run in on the edges, - not to look too hard, - but you camot stir romd much without disturbing the under-tone. The highest lights must be laid on with the bristle-brush, and with gouache much thicker than you have been using it. Have it as thick as butter; put it on lightly, loading the petal with eolor, which will look well even if it is raised a little from the surfaee, provided it is applied in just the right shape to represcnt the raised parts of the flower. Remember that on all curved surfaces the highest lights are not close on the edge, but a little inside, lcaving the local tint (which is your under-tone) between them and the darker parts.

The dark markings are put in with dark transparent eolor, and a fine-pointed sable brush. Light stamens and yellow anthers must be put on with thick body color, in sharp, quick touches, when all is dry.

Preeisely the same process is used, without any set of gouache-eolors at all, with only a bottle or tube of Chincse white to combine with ordinary moist colors. You will find you can make oparque colors out of transparent ones by mixing them with Chinese white, and save the expense of a sct of gouache-eolors, whieh moreover, are troublesome, and dry up quickly, and when they are dry and hardened arc useless. With fresh Chinese white you can eombine all your transparent eolors, and get a range of tints with which you are familiar. The Liquid Colors eombine equally woll - or even better - with Chinese white, and you may avail yourself of their rich tints. If, however, you have no set of gouache eolors, you must be on
your guard in the use of Chinese white. Water added to moist colors lightens their value without changing their tints; but Chinese white really changes the tints of colors in a most disappointing manner, giving a cold, wan look to tones that were rich and warm before it was added. For instance, the brightest possible green, made of Prussian blue and gamboge, when mixed with Chinese white, takes on a dull, chilled aspect. With reds it has just the effect that cream has upon damson juice, or a cold day upon bright-red lips. Chinese white has an equally morpleasant effect upon yellows, and on all combinations which have yellow in them, - as the oranges and reds employed for nasturtimms and similar flowers, and upon yellow greens. Blue greens, on the other hand, are enhanced by it. Carmine or lake, used for pink flowers, grow delicious by the addition of Chinese white.

The trouble is obviated by the glazing I juist spoke of. After the first flat tint is on, and the warm shadows added in transparent color, and both are perfectly dry, you may put a light wash of gamboge, or whatever will bring back the tone you want, over dark and light alike. The thick, high lights, laid on with opaque color, may be glazed also, but with caution. Pure white is good for these bright touches, unless it is evidently the wrong tint. In leaves, the blue tone characteristic of Chinese white combinations is sometimes just the thing to represent the sort of bloom seen on many shiny leaves when the light falls upon them in one direction; therefore leave this effect on the parts wherc it is useful, only glazing the rest with transparent color.

Flowers painted on gray paper with body-color are, perhaps, more charming than any others when they are well done. You will do well to study the best specimens of this work (chiefly French), in order to see what may be attempted with success. There is no final blending of tints with the brush, or stippling, or much rounding of form. The color is laid on flat, and in some places semitransparent for the half lights and transparent shadows. Thick spots of color are used for the high lights, and common moist color for darker parts, and for modelling or "shading."

These cffects, you will see, are much more like those of oil painting than of transparent water-color. The advantages of both gouache and oils is, that they can be applied to dark surfaces, which are best and most durable for almost all kinds of decoration. Body color seems to me preferable to oils for most things, on account of the greater neatness of water mediums, as almost all of the effects of oils can be produced by careful use of opaque water-colors.

Among the common moist colors there are some more opaque than others. These, which it is well to avoid when working in transparent color, come well into play in body color. They are those which in the pans have a chalky look, as if - as they probably are - they were combined, in making, with Chinese white. For glazing, use transparent colors.

OIL PAINTING.

## Materials for Painting with Oil-Colors on Silk, Satin, etc.

Box of Oil-Colors in Tubes. Bristle Brushes, Nos. 0, 1, 2, 3.
Sable Brush for Oil Painting, No. 3 or 4.
Palette (Wood).
Palette-Knife.
Medium for mixing the Colors with.

Of the above articles, all which are not demanded for this chapter will be required in Chapter XV.

The instructions which have been given so far for the management of colors have been for a water medium, that is, water-colors. We now come to colors mixed with oil, and if the reader has learned what the previous chapters are intended to teach, he will find no difficulty in painting with oil-colors, as the method is almost the same as with gouache or opaque water-colors. Although the main principles are the same, whether colors are mixed with oil or water, there arc, however, certain differences to be observed with each medium or vehicle, as the fluid with which they are mixed is called. For example: in the use of water-colors, lighter tones are obtained by adding water,
and darker ones by repeated washes of the same color. In oil painting, however, lighter tones are obtained by the addition of white, but the addition of black does not always produce darker tones: thus, suppose it necessary to deepen a yellow, the addition of black would give a muddy, greenish tone, not by any means the deeper yellow desired. Another yellow, deeper in tone, must be taken, as lemon yellow can be deepened by the addition of cadmium or chrome. With blues and reds the case is less marked, but better results are obtained when different and darker blues and reds are taken instead of black to deepen the tone. Thus: a very good blue scale runs from cobalt through permanent blue to indigo; a crimson red scale from the lighter tones of crimson lake and white through its deep tones to brown madder; a scarlet red scale from vermilion through burnt siemna to brown. It is of course impossible, in the short space allowed, to give complete directions for every scale, but enough has been said to illustrate the principle, and the student will soon be able to apply it to special cases.

With the change of medium from water to oil, some change in the list of colors will be necessary, as all colors do not work equally well with both mediums; we will also add black and white to the list, viz.: -

Flake White. Vermilion.
Yellow Ochre. Chrome Yellow.
Raw Sienna.
Burnt Sienna. Light Red.

> Crimson Lake.
> Emerald Green.
> Permanent Blue.
> Vandyke Brown.
> Ivory Black.

In forming our palette we have, with two exceptions, selected the colors which are the most generally used by artists. The two exceptions are chrome yellow and crimson lake, which are taken in place of cadmium yellow and madder lake solcly on the ground of economy, as they cost only about one-quarter as much, and, for beginners' use, are just as good. The difference is that chrome yellow and crimson lake will not stand; they will change, perhans disappear altogether, while cadmium and madder lake are permanent colors.

Our twelve-color boxes all contain mixing directions. We should, however, advise the reader to try other colors. What has been learned from practice with water-colors may be applied here.


## CHAPTER XIII.

## oil PAinting.

For painting on canvas and on wood, oil colors are the best pigments, and they may be used on silk or velvet, to which the great objection is the oil in them, which makes a stain in the material if it spreads out beyond the design on the surface. It is a good plan, to avoid this, to have thick blotting paper moder the colors as you squeeze them from their tubes; this absorbs the superfluous oil, and makes them as dry as you desire. Some skilful workers on silk employ magnesia rubbed on the back of the material to absorb the oil. Magnesia has a doubtful effect, however, on the texture of the stuff.

The process is just like that described for the use of body eolor. The color taken from the tube should be mixed with turpentine by the use of a palette knife, till it
reaches the thickness, or rather thinness, just right for the first undertone, to lue laid on the surface of the petals to be painted. 'This represents neither the highest light nor deepest dark, but a tint between. More than with body color, the under-tone of the background may be allowed to shine through and influence the shadow-parts. The only places which should be loaded are the lights, and these must be laid on when the under-tone is dry, in sharp clear forms. The relief given by the thick color aids very much the brilliancy of the effect, and this is lost if it is shared by the lower values.

As the opaque nature of oils makes it possible to cover up one tint with another, beginners are apt to think that they can hide their mistakes by painting over the bad place with some new attempt at excellcnce. This is a poor plan, and camnot be used in decoration, for the design must look fresh and spontaneous, as the background upon which you are employed will not bear working over, especially textiles like silk and satin. You must know, before you touch brush to background, just what you want to do, and then put it in boldly and firmly. It is for this reason that I recommend experiments before attacking the real work; but even on your try-piece, do not "fuss" over it. If you get on a wrong tint, leave that attempt and start another one, not trying to cover up faults. One great advantage of begimning with watercolors is that you cannot cover up your mistakes, but must take care to use the right colors the first time.

The proper mixing of oil colors may easily be mastered with a due attention to the simple rules of colors I have
given, which apply equally to all mediums. Flake white takes the place in oil painting that Chinese white does in gouache, with this addition, that it makes all the colors it is combined with work to advantage.

As in the other ways of painting, yellow, blue, and red are to be taken as the elementary principles of all colors, for they cannot be produced by the mixture of any other colors, while all the others may be produced by the proper mixture of these. Flake white mixed with other colors not only lightens their tint in proportion to its quantity, but increases their opaqueness, and cools (or makes bluer) their hues like Chinese white.

Thus with flake white and
$\left.\begin{array}{l}\text { Chrome Yellow } \\ \text { Naples Yellow } \\ \text { Yellow Ochre } \\ \text { Raw Sienna }\end{array}\right\}$ are formed $\left\{\begin{array}{l}\text { Primrose. } \\ \text { Lemon Color. } \\ \text { Yermilion } \\ \text { Yellow Buffs. } \\ \text { Darker Buffs. } \\ \left.\begin{array}{l}\text { Light Red } \\ \text { Indian Red } \\ \text { Ultramarine } \\ \text { Cobalt } \\ \text { Prussian blue }\end{array}\right\} \text { are formed }\left\{\begin{array}{l}\text { Pink Flesh Tint. } \\ \text { Salmon Color. } \\ \text { Flesh Tints. } \\ \text { Purplish Flesh Tints. }\end{array}\right. \\ \begin{array}{l}\text { are formed cool light blues of differ- }\end{array} \\ \hline \text { ent tints and highness. }\end{array}\right.$

Different oranges may be mixed by Chrome Yellow ) $\left.\begin{array}{l}\text { Naples Yellow } \\ \text { Yellow Ochre }\end{array}\right\} \quad$ with $\quad\left\{\begin{array}{l}\text { Light Red } \\ \text { Red Lead }\end{array}\right.$ to make various bright and opaque oranges, while
$\left.\begin{array}{l}\text { Yellow Lake } \\ \text { Raw Sienna } \\ \text { Lemon Yellow }\end{array}\right\}$
with $\{$ Carmine
(Scarlet Lake make transparent orange.
$\left.\begin{array}{l}\text { Clrome Yellow } \\ \text { Naples Yellow } \\ \text { Yellow Ochre }\end{array}\right\} \quad$ with $\quad\left\{\begin{array}{l}\text { Ultramarine } \\ \text { Cobalt } \\ \text { Antwerp Blue }\end{array}\right.$
produce greens more or less opaque, while
$\left.\begin{array}{l}\text { Yellow Lake } \\ \text { Raw Sienna } \\ \text { Lemon Yellow }\end{array}\right\} \quad$ witb $\quad\left\{\begin{array}{l}\text { Ultramarine } \\ \text { Cobalt Blue } \\ \text { Prussian Blue }\end{array}\right.$
produce together transparent greens.
Mixed purples are made in the same manner by combinations of blues and reds, and an infinite variety of mixed browns can be produced by judicious combinations.

Nearly all grays are produced by mixture; among them, Ivory Black, and White,
Light Red, Ultramarine, and White, Vandyke Brown and White,
will give us sufficient variety. It is even more important in oils than in water-colors to keep your colors pure, and to avoid indiscriminate mixtures of all sorts of things, hoping for good results. The combinations absolutely necessary must be made on the palette, with the paletteknife, of but a few primary tints, and lightly touched together, not stirred up into a hopeless mess.

The above lists will show you that some of the colors are transparent in themselves before they are combined with white. These may be used pure for glazing after the undertone is dry; that is, for leading lightly over a surface to change the local color when that does not please you, as may be the case if the flake white has produced too cool a tone.

Do not undertake to use all the colors here mentioned;
but begin by buying a few primary colors, and trying experiments in combining them with flake white and with each other. Your knowledge of your water-color palette will help you in this; for, with a few exceptions, even the names of the colors are the same. You will miss gamboge, which in oils is not the faithful stand-by it is in *water-colors; but you must choose from the range of yellows those suitable for different occasions.

You will find further information on this subject in "Tilton's Artists' Colors, and How to Mix Them." This book describes all of the different colors employed by artists, explains their uses, and shows how, by mixing, good substitutes for any of them can be obtained from the several colors in our boxes.

The following list will help you in mixing colors; use the most of the first-mentioned and least of the last-mentioned ; i.e., for
Black, - a good deal of Vandyke Brown and a little Permanent Blue.
Blue Black, - Permanent Blue, Crinson Lake,* Vandyke Brown.
" Bright, - Permanent Blue and a little White.
" " - Cobalt.
" Dark,-Permanent Blue.
" Darker, - Permanent Blue and Black.
" Dark Grayish, - Permanent Blue, Yellow Ochre, and a little White.
" Dark Greenish, - Permanent Blue and a little Yellow Ochre.

* Or Madder Lake if you have it.

Blue Dull, - Permanent Blue and a little Raw Sienna.
" Pale, -add White to Permanent Blue until the shade desired has been obtained.
" Peacock, - Permanent Blue and Emerald Green.
" Robin's Egg, - same as above, with White.
Brick Red, - Vermilion, a little Yellow Ochre, and Burnt Siemna or Light Red.
Red, Dark, -add a little Vandyke Brown to the above. Brown, Olive, - Vandyke Brown and a little Yellow Ochre.
" Dark, - Vandyke Brown.
" Medium, - Vandyke Brown and Burnt Sienna.
" Light, - add Yellow Ochre to above.
" Reddish, - Vandyke Brown and Crimson Lake, or Vermilion.
Buff, - Yellow Ochre and a little White.
Cobalt,- Permanent Blue and Emerald Green in about equal proportions.
Cranberry, - Crimson Lake, a little Yellow Ochre, and White.
Cream Color, - White with a very little Yellow Ochre. Crimson, - Crimson Lake.
". Bright, - Crimson Lake and Vermilion.
" Dark, Crimson Lake and Vandyke Brown.
Emerald, - Emerald Green.
Fawn, - Light Red, Yellow Ochre, and White.
Flesh Color, - White and Light Red.

| " | " | Vermilion. |  |
| :--- | :--- | :--- | :--- |
| " | " | Vermilion, and Light Red. |  |
| " | " | Yellow Ochre, and Vermilion. |  |
| " | " | " | Crimson Lake. |

Variations of these combinations will give all the flesh tints required from early childhood to advanced age. Gray, Light Blue, - Emerald Green, Permanent Blue, and White.
" Dull, - Permanent Blue, Burnt Sienna, and White. Green, Bright, - Permanent Blue and a little Chrome.*
" Dark, - Permanent Blue and less Chrome than above.
" Dull, - same as above, with a little Burnt Sienna.
" Yellowish, - Chrome and a little Permanent Blue.
" Reddish, - add Light Red to above.
" Blue, - Permanent Blue and Chrome.
" Olive, - Light, Vandyke Brown and Chrome.
" Olive, - Light, Permanent Blue and Raw Sienna.
" Olive, - Dark, add more Vandyke Brown.
" Peacock, - Emerald Green and a little Permanent Blue.
Hair, Auburn, - Yellow Ochre and Light Red.
" Brown, - Vandyke Brown.
" Brown, - Vandyke Brown and Raw Sienna.
" Brown,--Vandyke Brown and a little Yellow Ochre.
" Flaxen, - Yellow Ochre.
" Flaxen, - Yellow Ochre and White.
" Gray,--Light Red, Permanent Blue, and White.
" Gray, - for dark streaks, Black.
" Reddish Brown, - Vandyke Brown and Light Red. Old Gold, - Yellow Ochre and a little Chrome. Olive, - Yellow Ochre and Black.

[^2]Orange, - Chrome with a little Vermilion.
" Red, - Chrome with more Vermilion.
Peacock Blue, - Permanent Blue and a little Emerald Green.
" Green, - Emerald Green and a little Permanent Blue.
Pink, - White and Vermilion.
" - White and Crimson Lake.
" - White, Crimson Lake, and a little Chrome.
Purple, - Crimson Lake and Permanent Blue.
Red, Bright, - Vermilion.
" Dark, - Vermilion and a little Burnt Sienna, or Vermilion and Crimson Lake.
Rose, - White and Crimson Lake.
Salmon, - White, a little Vermilion and Raw Siemna.
Scarlet, - Vermilion.
Straw Color, - White and Yellow Ochre.
Stra wberry, - Crimson Lake and Vermilion.
Tan, - Raw Sienna and a little Yellow Ochre.
Terra-cotta, - Raw Siemna, Crimson Lake, and White. " - Dark, add Burnt Sienna.
Wine, - Crimson Lake and a little Vandyke Brown. Yellow, Bright, - Chrome.
" Dingy, - Yellow Ochre and a little Chrome.
" Pale, - White and a little Chrome.
" Reddish, - Yellow Ochre, Chrome, and a little Light Red.

* Madder Lake and Cadmium may be substituted for Crimson Lake and Chrome Yellow.


## PAINTING ON SILK AND SATIN.

The following chapter deals directly with subjects for which the preceding pages have been preparatory. The materials will be the same as required for the different mediums with which the pigments or colors are mixed, viz.

Transparent Water Colors, p. 112.
Liquid Colors, p. 123.
Gouache or Body Colors, p. 136.
Oil Painting, p. 146.
Whichever medium the reader decides to employ, she cannot well afford to neglect reading what has been said of the others, as all have more or less connection with each other.

Gouache or body-color painting may be new to many of our readers. The method, as well as the effeets, are so much like oil painting, that the same directions for the management of colors would, with trifling exceptions, answer for either. The advantage over oil painting is in drying immediately, and no danger from spreading oil or turpentine.

To paint with oil-colors successfully on such delicate materials as silk and satin requires some knowledge of the capacity of the materials employed; even then it is not without difficulty. The preceding pages will afford those
who are prudent an opportunity to acquire some knowledge of the subject. A drop of oil or turpentine on a delicate silk or satin is not usually regarded as highly ornamental, no matter how skilfully it may have been applied; and this is what is likely to occur when one dabbles with such things without proper experience. Nevertheless there are those whose conceit will prompt them to do so, whatever those of experience might say to try and prevent such folly.

In the following pages the reader is told to thin her colors with turpentine, it being supposed that she has already considered the advice given in Chapter XIII. to first squeeze the colors on blotting paper, so as to extract the superfluous oil and prevent its spreading when applied to the material. By this method, while the danger from spreading oil is partially avoided, a lesser one is incurred by the use of turpentine, which may also spread, but not so disastrously. This new danger can only be avoided by acquiring skill in mixing, which is only born of experience. Some professional decoraters will not use turpentine, and only practise with clear color after extracting the oil, as above mentioned.

The same methods may also be used as are described for preparing the ground in Transparent Water-Color painting, and for Body Colors, viz : fill in the outlines with Chinese White.
d


## CHAPTER XIV.

## PAINTING ON SILK AND SATIN.

## I. WATER-COLOR.

As both silk and satin materials, when painted, require similar preparation and treatment, I class them together, simply pointing out differences in the treatment of the two when such occur.

The first question that presents itself is the choice of the silk or satin. With regard to color, for silk, all shades of white, from cream-white to $p^{\text {ink }}$, and from lemon-white to yellow, are suitable, but not dead or flake-white, which is not in itself so pretty as the other shades, and which is: too much like the tint of the white paint about to be laid upon it. The yellow tint now called "old gold," blue such as is known as sky-blue, green of the "eau de Nil" shade, and cimnamon-reds, all look well. Colors brighter
than these are not suitable for backgrounds; for they are too vivid in tone to show the beauty of the paintiug.

On light backgrounds, such as these I have mentioned, the design will stand out with its own effect of color and form, on its own merits, so to speak, as if it were seeu in the open air. A dark background, on the other hand, lends itself more to the composition, and, while relieving more the light values of the design put upon it, is more a necessary part of it. For this reason, although a very light background can reccive almost any colors dark enough in value to be relieved upon it, the colors of a clark background must be chosen with more care in reference to the design put on it, that it may both harmonize and contrast in agreeable gradation of tint and value. For dark backgrounds, Oxford and navy blue, maroon or very deep cardinal red, olive and sage green, or plum-color, are all suitable. If I were going to paint a design upon a light background, I should think first of the subject and coloring of the design, and then choose some light, pretty silk or satin shade to put it on ; on the other hand, for a dark background, I should search first for some piece of stuff in itself delicious in rich shade and texture, and then think what design would be suitable to put upon it.

Silk, as to texture, should be of a close and even make, not corded, and not much dressed. Satin should be cotton-backed, firmly and well woven, with a smooth surface.

There are different methods of preparing both silk and satin to reccive the color. Some teachers claim that both are really better for a sizing passed over before they are painted,
to take away the dressing upon the surface; but, unless this be done with care, it will tend to cockle the material, which is one of the worst difficulties to overcome. Before sizing, stretch the silk in an open frame, such as is used in needle-work, or attach with thumb-tacks to a drawingboard. 'Take great care to stretch the silk evenly, and to attach it firmly; any error in the stretching will result in unevemness to the silk, and can never be remedied.

To size, take half an ounce of gelatine, and put it in a tall tumbler just covered with cold water. Leave it for an hour, pour off the cold water, and add a pint of boiling water to the gelatine, stirring and dissolving it in the water; run the mixture through coarse muslin to strain it, and, while still hot, apply it to the silk, which we will suppose you have stretched as above directed. Take a small, soft, and clean sponge, dip it into the hot gelatine, and thoroughly wash over the surface of the silk. Do not make it too wet, but rub the mixture well in, and leave no place untouched, as such places will show when the gelatine has dried. Rub with a piece of soft silk, and leave the silk stretched until it is perfectly dry; then it may require stretching again, but very likely not.

The same mixture can be applied to satin, only upon satin every stroke of the sponge will show, if not carefully joined to the next, like putting on a wet wash of water color on paper. The design, as before stated, should, in every case, have been carefully drawn out on paper, with due reference to the form of the space to be occupied by it. Transfer the outlines of the design ulon
the silk or satin with tracing paper, according to the directions at the end of Chapter $V$. The objection to the above-described mothod is, that silk prepared in this way is liable to crack and break; besides, it destroys the original lustre of the material.

Another way is to stretch the material as above directed; then draw or transfer your design to it, and fill in the outlines - that is, the parts which are to receive the color - with the sizing. This gives the same foundation as the first method, and will prescrve the lustre of the material not covered by the design, and, at the same time, lessen the danger of breaking or cracking. Or, you may paint directly on the material without sizing, after stretching and applying the design. All of these methods are in general use. You had better try them all on waste material, and decide for yourself which you like best.

Thus far, the process is the same for all painting upon silk or satin ; but now there are two ways of using water color, the first and, perhaps, most distinguished of which is in Transparent water-colors.

This is donc with the ordinary moist colors in tubes or pans, absolutely as I have described it for practice on paper, except that it is harder to carry out the process on silk or satin with good effect; and, to obtain the best results, you must confine yourself to white or the lightest tints of silk and satin, as the transparent colors will not work satisfactorily on the darker shades unless the material has been prepared to receive them. Landscapes, sea views and "Watteau" groups of figures, can only be
effectually done in transparent color, as the delicate work they require is hardly possible in what I will now describe.

## If. PAINTING IN BODY COLOR.

One method which I do not much admire is, having drawn, as before instructed, the outline of the design, then to fill in this outline with Chinese white mixed with Tilton's resisting medium. This mixture should be applied carefnlly and smoothly to every part which is to receive color. When dry, the design may be painted as you would paint on white paper. The better way, if you have a set of gouache-colors, is to use them direct from their bottles; otherwise, work by mixing Chinese white with ordinary moist paints. Stretch carefully on an embroidery frame some spare pieces of the silk and satin you mean to paint on, upon which you can try the effect of the various shades of color before risking them upon your work.

Be careful not to get Chinese white into the pans of moist color, by transferring the pure color to the palcttc before mixing it with white, or all your paints will become dirty and muddled together.

Tilton's Chinese white, fresh from a new tube, has a delicious, soft, pasty consistency. It is very apt to bccome dry, when it will cake, and rub off at the slightest touch. If it should, on trial, thus come off in your experiment upon the spare silk, add Blending Fluid to it before using, and rub it well up with a palette-knife to make the mixture perfectly smooth.

Begin to paint by laying a coat of Chinese white, thus mixed, over the chief forms of the design which are to
stand out in front. For this, you will have to exercise all your skill in flat tints acquired by practice on paper; for it is very easy to make the quickly drying body-color look streaky. It must look as if it were cut out of thin, white paper applied to the satin. To effect this, each successive brushful of white should be laid close to the wet edge of the last, the outline firmly touched, but kept together with the inside, not lined round and afterwards filled in. While still wet and shiny, drop into the white surface whatever tint is desired, with a different brush from that which carries the white. Thus, your first process results in a flat, white representation of the design, with a suggestion in it of all the colors of its different parts - viz., for a green leaf, drop in green ; a pink flower, drop in pink, - and, as you grow bold in the manipulation of the wet white, you will carry these first effects farther and farther. While this is drying, paint such other parts of the design, as are meant to recede, with somewhat shadowy tints mixed with white. These, if neatly done, will require no retouching; in fact, if they are not neatly done, no amount of retouching will redeem them. They are frequently painted in soft grays, yellow-browns, and other plain shades, to interpose between the other more prominent objects and the background.

For the second painting, return to the petals, and put in the half-tints. You will find that painting upon the under-coating is a delicate business; the point of the brush is apt to stir up the white underneath, even when it is quite dry, as it should be. This can be overcome by using Tilton's resisting medium. Therefore, be perfectly sure
what you mean to do before touching the work with your brush; put in your forms lightly, but firmly, without any attempt to blend this shadow color with the under-tone. Such blending implies a want of faith in the forms you are now putting in, as if you hoped your doubt as to their being right would be concealed by vagueness, - a sad mistake. These shadows should be of a warm gray, influenced by the local color of the part you are painting. You will find the addition of white to any tint changes the actual color of it, while lowering also its value: therefore, in working this second time, use pure color, as much as possible, with Blending Fluid to wet it. Your first tint should remain always to indicate the local color; the modelling is given by the half-tint, after which, the high lights can be added with pure white, or white slightly tinted. Much depends upon the shape in which these high lights are added. You must have a definite idea of the form of that little spot of light before attempting it, and then put it on at once, firmly and well. To convince yourself of the importance of this, look at your own eyes in a looking-glass, with a good light upon them. Notice that white reflecterl spot upon each pupil, and you will see that it has a form as definite as any other part of your face. It would not do at all to represent that spot by a hasty poke with the tip of a brush full of white paint. It must be as nicely modelled as if it were cut out with scissors and stuck on. Do not attempt minute shading or stippling; but let the wet colors do their own blending, or remain distinct, which is much more effective when the forms are good. Mark out the stems clearly, with appro-
priate tints, and trace with a fine point of a brush the veins of leaves, stamens, etc., of flowers, and any fine lines that will define and give character to the design.

Body Color Painting on Satin will allow of even less shading than upon silk. White satin will not need a ground of Chinese white, as it will be sufficient to mix it and the Blending Fluid with the first tints of the flowers and leaves on the palette ; but the high lights, or first values, should, in all cases, be laid on in such a manner that the satin or silk texture is hidden by them.

I have spoken of flowers as being the most available forms for designs to use on silk or satin; birds, butterflies, ladybirds, flies, and insects, are great accessories to any painting. The brightest tints of the color-box can be used to paint them with, over the layer of Chinese white.

Gilding is often added to increase the effect of bodycolor painting; it is not very suitable for flower subjects, except on dark backgrounds to mark out ears of wheat, or when employed upon dark materials npon which white flowers and brown leaves liave been sclected as the subject. The gilding is then used about the leaves as their highest light and the veins. It should be remembered that gold has a quieting effect in decoration, rather than a gaudy one. The gold metallic colors used in lustra painting are the best to use. Another method of painting on silk or satin is to tint the design with the various shades of one color only. This depends for its success upon the truthfulness of the drawing and the selection of tints for the background and painting which will best harmonize.

## III. SILK AND SATIN IN OILS.

Silk and satin can both be painted in oil colors with no previous preparation. Tightly stretch the material, and thin the colors with turpentine, not enough to make them run. It is this that requires the most practice, as the superfluous turpentine spreads about on the material outside the design. There are two ways to proceed in painting with oils on these fabrics. The first is to use color enough, and not more than enough, to cover the texture of the fabric underneath, as with Chinese white in painting in body color. If the material shows through when the first coat is dry, apply a second; but this should be avoided by putting the paint on right at first, it is so tiresome waiting for oil colors to dry. Bring out the stamens of flowers and the markings of the leaves, stems, etc., sharply, and attempt even less grading than in body color. The second method, and the one which seems most popular at present, is to allow the color of the background - that is, the silk or satin - to prevail, as a part of the painted design, instead of covering it up with the first layer of paint, as in the previons instance.

To make this way effective, choose flowers and leaves, for your design, of which the edges and outer parts are lighter than the imer parts. Then, having prepared your palctte with such tints as you wish to use, combined with Chinese white in the proper proportions, according to the general directious given for oil painting in Chapter XIII., paint the ligh lights and the second tints with a color answering to the local color of the object. I will take, for example, a
rose-leaf. With your brush well filled with a suitable green for the local color, - i. e., the real color of the leaf, which may be found between the shadows and the highest light or value, - paint round the slightly indented edge of the leaf, and towards the middle of it, perhaps covering all of one half of the leaf with this color, but leaving the other half unpainted in certain parts, giving these unpainted parts the form of the darker parts of the leaf. The paint you are putting on will define the shape of the leaf, while the silk underneath will look right for the darker part without any painting. This, of course, would be the case with dark green silk; if the background be of maroon or dark crimsou silk, it will also be effective as a part of the leaf, as there is almost as much dark crimson in rose-leaves as there is green. The side veins of the leaf may be suggested with green paint.

When this is dry, on top of this color, the highest value may be laid; and the veins and other markings may be further carried out with dark paint, pencilled with a finepointed brush.

This way has a lighter, freer effect than the first, which seems to overload too much the silk with color; but the other way leaves less to the skill of the workman.

Do not allow your hand to rest on the silk or satin. If you have acquired the proper habit of working from the shoulder, you will not need any hand rest. There is a wooden frame for this purpose; or the material may be covered with paper or cloth where the hand rests on it.

The finished painting will take four or five days to dry ; if it then looks dead and colorless, it may be varnished
with white spirit varnish. But when the paint has been put on with just the right amount of turpentine, and thick enough, the colors will remain bright; and it is far better to omit the varnish, which has always a sticky look.

The success of oil painting on silk or satin depends upon the clearness with which the oils are (sparingly) employed.


## PAINTING ON VELVET.

## MATERIALS.

The same as given in the preceding chapter.

174


## CHAPTER XV.

PAINTING ON VELVET.

This was much practised in England during the first half of the present century, and in families that have preserved their relics there may still be seen faded old pincushions and reticules still graceful and dainty, with a faint perfume of the olden time clinging to them. Most of this old-fashioned painting was done upon white cotton velvet; but it was executed before the soft modern shades of color were manufactured, and the idea of laying on heavy body color would have shocked our delicate grandmothers, who never employed dark background, and held closely to clear transparent colors.

It is so hard to paint well on velvet, and failures in this
art are so ugly, that one is reminded of Dr. Johnson's famolis comment on a difficult piece of music: "Madam, I wish it were impossible." The difficulties of the work arise from, -

1 'The great powcr of absorbing color in the raised pile of the material, which can never be worked up to any minuteness of finish from having to contend against this loss of color.
2. The fact that the pile becomes matted together if even the smallest quantity too much of paint is laid on.
3. If anything less than the just amount of paint is applied, it rests in little separate drops on the separate hairs of the pile, leaving vague the outline of the design, while the color of the background is apparent between these little drops, instcad of the tint requisite to the design.

Moreover, handsome velvet is too expensive to be wasted on experiments likely to prove, at first, failures ; while the cheaper velvets, good enough for such attempts, are so inferior to the fine ones that success in painting upon these by no means ensures success upon the long pile of the richest velvet or plush.

The brave beginner, not discouraged by these remarks, should select for practice cotton velvet or velveteen of a close pile and make, as much practice is necessary to enable the worker to manage the color so that it may be neither too liquid or too thick.

I shall describe, as before, the three methods of painting, viz.: (1) in transparent moist colors; (2) gouache, or body colors ; (3) with oil-paints.

## I. TRANSPARENT MOIST COLORS.

This method can be used only on white or very light velvet, but the work presents no difficulty except the everpresent one of making it look well under adverse circumstances. The velvet should be stretched upon a board or embroidery frame, and the design, if it is your own, transferred to it, first carefully drawn and colored upon coarse paper. In this case, to ensure its being laid upon the right place on the velvet, you may indicate the top, sides, etc., of the design with pins stuck into the velvet at these places; afterwards connect these with the proper outlines, kept as simple, but at the same time as accurate, as possible, with a little dark color in a fine-pointed sable brush. ${ }^{1}$ Now paint the design as prettily as you can, using rich, pure colors, and working as you would upon paper, only not attempting too much. The velvet itself will give enough softness to your touches, and the difficulty lies in rendering character and sharpness sufficient to render your intention clear. Paint with the usual moist water-colors, much dryer than on paper.

## II. GOUACHE, OR BODY COLORs.

The process of opaque painting on velvet is much the same, whether done with gouache or with oils. I prefer the use of gouache, and liquid colors diluted in water, to oil-color in tubes; but this is a matter of taste, and affected by the

[^3]nature of the thing to be decorated. One way is, after stretching the velvet-the closer and shortcr its pile the better - tightly in its frame, which should be open, so as to have access to the back as well as the front; put your design upon it as bcfore, cither by Tilton's transferring patterus, or by copying your own previously prepared design with Chinese white in your brush for the outline; repeat the outline on the back, making sure that it is upon exactly the same part of the velvet. 'This you can ensure by means of pins stuck through from the front to guide you. On the back, paint in all strong bits of color or deep shadows, letting the colors soak well through to the front, but without wetting the pile of the velvet. Then begin coloring on the front, laying in the local tints most nearly allied to the highest values, then the shadows; thesc two will blend with each other enough for gradation of tone. You will find the color previously put on the back helps greatly. Use a scrub-brush to rub in the largest surfaces, flat bristle brushes for smaller parts, and a sable brush with a good point for outline.

I think the sccret of all good painting in body color on textiles is using bristle brushes instead of sable, except for the finishing work on top of the first layers of color. Work your brush with the pile of the velvet, not against it, and take great care not to soak the pile with wet; this is hopeless, it takes a long time to dry, and then has lost all its velvety character. Allow the natural tint of the velvet to serve wherever it will, and to come through a light film of color dragged over the surface in the halftints, or even darker parts, with the brush held clown sideways.

The high lights must be laid on sharp and clear, with thick light color picked up on the end of the brush and deposited on the material with as little manipulation as possible. If they may be pure white, this is easiest to manage, and they may be put on in pure white and lightly glazed afterwards.

When the material is to be fastened down or lined, you need not paint at all on the back of it. You may, on the other hand, work all the time on the surface of the velvet, laying a wash of thin Chinese white, slightly tinted witli color, over all the petals and flowers, and afterwards model this surface with shades and markings ; in fact, you may try all the ways of working in body color upon dark paper, as described in Chapter XII. In my opinion, the prettiest method is to work with only one set of touches for the whole design, relying for effect upon the lovely texture of the velvet, the richness of color you have chosen, and, above all, the precision and excellence of your drawing. You will choose from the transferring patterns some flower which is or may be lightest at the outside of its petals, for example, a wild rose. On the vclvet, undisturbed by under-tone, blending fluid, or any other medium, lay a thick mass of color, as thick as butter, made of Chinese white just tinted with rich red, so as to be a lovely pink. Do not try to work this in, but leave it just in the shape of the edge of the petal, then press down the brush along the petal, so that its whole side may give a little color, not much, to the velvet. It will be very nice if up at the top of the brush there is some bright pink which will lend a tint to this film, catching upon the top of the velvet pile.

Do not meddle with it, but lay another petal close to it. You will be pleased to see how prettily the velvet shades and grades the petal, only lost under the thick layer of paint on the edge. The yeliow centre of the rose may be made in the same way, thick points of color bounding the half-color caused by the sort of film I have described. The brush must do the whole of itself, laid on warily, - a small, flat, bristle brush that will pick up a good little mass of color on its point and deposit it just in the right shape. The green leaves of the rose can be done in the same way; it is clesirable to have the lighter values on the outside, as you can only with them define outlines, as you are working on the plan of letting the velvet itself give the darker values, more or less obscured by a film of paint from the top of the brush.

If you have seen velvet painted in this way, you will not only be able to do it, but will not want to work in the heavy overlaid method of putting an under-tone on first. It is, of course, ketter to see some one do it once or twice if you can, for this laying the brush down and squeezing the color off from it is hard to describe, but I am sure you will be able to manage it with perseverance.

## III. OILS.

In painting velvet in oils the same difficulties present themselves, and the crude properties of oil color seem not harmonious with the soft folds and rich texture of the material. The great danger is that the oil which is combined with the paint will exude upon the velvet over
the outline, and leave a dark greasy rim, a kind of halo, which is anything but ornamental to the work.

To prevent this, cut a piece of thick white blottingpaper about the size of your palette, and lay it over the whole, while the palette is still clean. If it is a thumbhole palette, cut a hole in the blotting-paper to correspond with the hole in the palette ; this, when your thumb is put through it, will steady the blotting-paper and prevent its slipping. If you now squeeze your colors from the oiltubes upon the surface of blotting-paper, the superflous oil will spread upou it, leaving the colors just dry enough for immediate use. In this case you will do well to squeeze only just so much at a time, as you are likely to use at once, for the blotting paper will go on absorbing the oil, so that by the next day the color will be hard and no longer manageable. Throw away this piece of blottingpaper as soon as you leave off working, and prepare a fresh one next time with a moderate amount of color, so that none may be wasted.

Another method used by some to prevent the oil from running is to rub magnesia carefully over the back of the velvet ; this will absorb the oil and prevent its ruming.

You may now paint your design exactly as I have previously directed ; you will do well to read oyer the general directions in Chapter XIII., and also the directions for painting on silk in oils.

There are various mothods of working, as you will recognize for yourselves by this time: 1. To lay an undertone of thin color over the whole design, and then to model it with shades and markings. I do not recommend
this for velvet, as the pile, overlaid with color, gets a clogged and matted look which you cannot avoid. The opposite fault is to drag a brush thinly charged with color over the surface of petals and leaves. 'This is tempting, and you think at first you have hit upon a lovely way of decorating velvct. But you will soon cease to be pleased with the vague, undefined look of your worls. The outline is lost, the color is confounded with the pile of the velvet, and there is no richness of tint, only a soft, blurry attempt at something which did not succeed. The better method is: 2. Wheu a pattern is selected with the lighter values on the outside of petal and leaf. These may be laid on with thick, good masses of color, defining the outline very sharply by painting close to the edge, rather inside than outside of the lines. You may "drag" if you please a little within the outline, to soften the gradation between the thick color and the darkest parts within, where the velvet itself may be left, but not elsewhere; and above all avoid "dragging" for tendrils and stems, as these must be put in sharp and clear to give a good effect.

## Kensington Painting.

As this method of painting, now much in vogue, is one process of applying oil paint to velvet, it comes properly into this chapter, although its intention is somewhat different, being a direct imitation of the stitches of the socalled Kensington embroidery.

It may well be inquired why this embroidery, so beau:iful in itself, should be imitated in paint, and not done
with all the lovely silks and flosses at the disposition of the needlewoman. The answer is, I believe, that the materials are much less expensive than these silks and flosses; besides, it is something new, and does not take so long to do it. The skill required for it is rather that of the needlewoman than the artist, for, undoubtedly, any one familiar with the laying of stitches in the proper direction for effect would find no difficulty in reproducing the same effect with paints instead of silk threads. This work had best be first attempted on velvetecn; it may be done on silk, felting, and any of the fabrics now used for embroidery. Plush of a short pile, which furnishes a richer background for the bright tints which should be employed, is the best adapted for the work.

The pattern may be one of Tilton's transferring designs, which can be transferred any number of times to any material, or you can make your own design. I should advise at first a small design stamped several times on a piece of cheap velveteen, for practice. Large flowers should be chosen, and, as I have said beforc, such flowers and leaves as have their edges defined by the lighter values, leaving the interior parts darker, in case you prefer to leave the velveteen mpainted to represent these paints, as is frequently done in embroidery, for you must remember that you are not now imitating nature direct, but the way in which threads are applied with a needle, and nature only indirectly, as she is imitated with the needle. Therefore you had better look at good specimens of cmbroidery before you begin - Japancse, for example - and see how they get different effects of firma, and even of light and
shade, by placing sets of stitches at different angles to each other. In embroidery the reason this is done is, that these sets of stitches in clifferent directions catch the light differently, and so show separately as different colors do ; the reason it is done in painting "Keusington" is merely to imitate embroidery.

After the pattern is transferred, the material should be stretched in an embroidery frame, or it may be tacked upon a drawing board. The painting is done with oilcolors in tubes, applied just as they are squeezed out, without the addition of oil or turpentine. The brush is not a brush, but a coarse pen. Different workers have different favorites. Some think a gold pen is best for transmitting the color, others prefer the great pen called a bank-pen, but any stout pen will do. A common saucer is rather better than a palette, on account of the curving side, to receive the color squeezed from the tubes. Mix your tints with a palctte-knife (or old case-knife) just as for any other kind of painting, according to the lists of colors in Chapter XIII., adding flake-white to produce the lighter tints. Limit yourself to but few tints, and remember that as a skein of silk remains from one end to the other of precisely the same "value," so your tints should each be miform with itself throughout.

You want now to get a quantity of paint into the hollow of the pen. There are diffcrent ways of doing this. By the way, do not put the pen in a holder, - it is quite unnecessary. You may take it by the point and scoop the hollow full of paint, afterwards wiping the back of the pen so that you can handle it without soiling your fingers.

Now mark over the outlines with the back of the pen next the material, turning the pen, however, slightly, so as to make the outline clear and sharp. Fill your pen again, and deposit as much color as possible upon the petal or leaf, drawing the pen towards the centre, or following such a direction as long stitches would be likely to take. You may apply various tints in this manner, blending them together with the pen. Do not be afraid to have the color stick up thick, like butter, from the material; remember the raised look of embroidery. Now, while the paint is soft, with your pen dry, scratch the petal or leaf over with little furrows in the direction you think proper to represent stitches. In petals these should be towards the centre, but parallel as far as possible, to give the neat, flat look of embroidered stitches. This scratching must be done after all the paint is laid on, i.e., the chicf colors, the darker shades and the high lights. Remember that the seratches should not be continuons over two shades, for one stitch could not be made of a dark and light color, therefore scratch all of one value first, then all of another, etc.

You may put in stamens, fine stems, and slight markings with the point of a sable brush, precisely as you would do in any oil painting, but give all these strokes the effect of stitches; do not curve them, for single stitches do not make eurves.

This knack of scratching the paint will be caught with a little practice, and it is upon this that the whole depends. You may find that a little sharp-pointed stick - for instance, the end of a match sharpened, or an orange-wood toothpick - helps you in making the markings.

As the paint is laid on thickly, it must be left a day or two to dry. On looking at it then, if you think it needs "touching up," lay on here and there bright points of light, or little dark effects, but do not destroy your stitches.

Kensington stitch is best on dark grounds; if you undertake to do it on very delicate silk, you may squeeze the paint on blotting-paper, but it is likely to diminish the buttery consistency of the surface so necessary for marking the imitation of stitches.

Kensington painting may be done with gorache or bodycolor, and also with the Lustra paints.

## LUSTRA PAINTING.

## Materials for Lustra Painting.

Lustra Colors.
Mixing Medium.
Brushes.
Palette, Slant, or Tinting saucers.

Palette Knife.
Drawing Board or Frame. Thumb Tacks. Turpentine. Flitters.

In the following chapter the reader is directed to grind the colors down with a palette knife. This will not be necessary with the bronzes if they are properly prepared, but the dull colors will require it.

Flitters do not come in the boxes, but may be bought separately.


## CIIAPTER XVI.

## Lustra or Metallic Painting.

This style of painting will recommend itself to those who have had no experience in decorative art, and who would like to make a beginning with a fair chance of success. It is very simple, and easily acquired, as it demands no knowledge of drawing, and no more of painting than can be readily learned, or can be gained from the practice with water-colors, which we have suggested as a foundation
for all beginners. It requires no familiarity with drawing, becanse designs can be had, drawn in outline on the material, requiring only to be filled in with color; or the design can be selected from the transferring designs and reproduced upon the material.

This kind of painting is done upon textiles with metal-lic-powder colors, which are made to adhere to the material ly means of a medium, mixed with the colors before they are worked in. The painting can be applied to every variety of decorative ornament, and looks well upon plush, velvet, velveteen, felting-cloths, ribbed or plain silk, and fine or coarse linen, \&c., as well as terra-cotta, wood, leather, glass - anything. Upon fise linen it makes excellent d'oyleys; upon coarser kinds, chair-backs, washbacks, and afternoon tea-table covers, for, as the coloring sinks into the material and almost becomes ingrain, it allows moderate washing of the thing adorned. Upon plush, velvet, and other non-washing materials, the painting is used either for friezes, dados, door-panels, lambrequins, table-borders, and curtain-borders, with rich and handsome effect.

Upon plush or velvet it can be made up into innumer* able decorative articles, such as clock-scarfs, thermometerstauds, calendars, brush, slipper, umbrella, or shaving cases, bags of all kinds, banner-screcns, pin-cushions, \&c., \&c., which are pretty for home decoration and for presents to friends.

The colors essentially characteristic of lustra painting are metallic; it is these which give the novelty to the process. Formerly the gold and silver paints in bottles, and
the gold and silver shells used in illumination and watercolor decoration, were so expensive and difficult to manage that they were but sparingly used. By the invention of the metallic colors we are furnished with a wide range of lustrous, brilliant pigments, which sparkle like tinsel or burnished metal. The shades obtained from them in yellow metal range from pale gold to the reddish tinge of copper; in white, from silver, through steely gray to the darkest lustrous black; greens and purples represent all the tints of burnished bronzes. There is an immense varicty of these colors. One is surprised to learn how many changing irridescent tints exist, by looking at the little bottles which contain them.

In connection with the metallics, the regular pigments - we mean the colors which mixed with oil are called oilcolors ; with water, water-colors, \&c. - can be used.

For the sake of a name, and to avoid confusion, I shall call those I have first described the lustrous paints, and the others the dull paints, although they are dull only by contrast with the shining surface produced by the metallic paints. Both the lustrous paints and the dull paints are used in the same way, $i . e$, by mixing with the medium which comes with them in the boxes.

In regard to colors. they may be had separately, or put up in boxes, including medium and brushes. It will be very much the same with these as with any other colors ; some will be able to obtain all of their cffects from a few, while others will conclude that they will require a larger number. For a limited number, we would suggest the box containing eight bronzes and four dull colors, as fol-
lows: bronzes, - gold, green, orange, copper, scarlet, silver, terra-cotta, purple; dull colors, - blue, green, red, and yellow ; also, bottle of medium, brushes, and directions for mixing. This box contains all that will be necessary for the beginner.

The following list includes all that come in the larger boxes:-
silver tints. 13. Lustrous, Terra-Cotta.

| 1. Dull, | Black. |
| :--- | :--- |
| 2. "6 | Steel blue. |
| 3. "6 | Green. |
| 4. Lustrous, Blue. |  |
| 5. "6 | Dark green. |
| 6. "6 | Light green. |
| 7. "6ull, | Silver. |
| 8. Duil, | White. |

COPPER TINTS.
9. Dull, Vermilion.
10. Lustrous, Fire.
11. " Brown.
12. 6 Copper.

GOLD TINTS.
14. Dull, Chrome yellow. 15. Lustrous, Green gold. 16. " Gold. 17. " Orange. 18. " Old gold.

CRIMSON TINTS.
19. Dull, Crimson lake.
20. Lustrous, Carmine.
21. " Purple.
22. " Chocolate.

It will be observed that the dull colors here placed at the head of each division harmonize with and suggest the gradation of tones which can be produced with each set of lustrous colors. Thus, black stands as the deepest value, and white for the lightest value, of the whole range of silver powders. If blue is employed with these, a set of lustrous blue grays, like steel, is obtained. If, instead of blue, you use green for retouching, you will
get a greenish scale of effects quite different from the blue grays, --more like oxidized silver thau steel. The gold tints, touched and combined with yellow, will give rich and pure gold effects.

The copper lustrous powders, worked in connection with vermilion, give all possible gradations of flaming orange effects. The crimsons, as I have called them for want of a better name, are very different; when employed with dull crimson, there is no fiery or yellow element in them, but only rich rose-red.

These results are brought about by using a dull powder in larmony with the like lustrous ones. You can try every experiment of contrasted tints. Black emriches all the metallic colors as well as silver.
"Flitters" is a name given to sparkling bits of lustrous matter which may be sprinkled upon the surface of wet color to give extraordinary glitter to the effect. There are little bottles of "flitters" to be procured in the various shades of gold, copper, etc.

Flitters are also used in veining leaves. They can be used by mixing with the medium, although they will produce more satisfactory results if sprinkled dry upon the surface of color before it becomes dry.

There is very great inequality in the colors which are sold for this work, and the slight saving which can be made in their cost will hardly compensate one for the iuferiority of the product. The most permancut and satisfactory results can only be obtained by using the best.

As it will be quite impossible for the novice to detect any difference in the colors before using them, it will be pru-
dent to buy only from reliable dealers. The temptation to substitute inferior goods which can be supplied at a lower priee, so as to have the apperrance of selling eheap, is too strong to be resisted by some who are in the trade. The materials supplied by Mr. Tilton are reliable. Equally good ean be obtained of others. But where a doubt exists, send to Mr. Tilton rather than run any risks of spoiling the material intended for decoration.

## Beushes.

The kind of brush to use depends somewhat upon the material to be painted and the style of painting. On coarse or rough fabries, and where it is desirable to serub the paint in, a bristle brush will be better; on smooth materials, and when a lighter toueh is required, an oil-eolor sable will work more satisfaetorily. Numbers one to four are all good sizes to have.

## Mixing Colors.

The eolors ean be mixed in a ehina slant, or in small tinting-saucers. We prefer the latter for convenienee. The metallies of the better quality do not require grinding with a palette knife. They may be mixed with the medium with the brush. During the painting they should be stirred frequently with the brush, as the colors sink to the bottom. Mix but a little at a time, and add color and medium as may be needed. A very little experience will teach one how to manage the colors. Some materials will require a thick mixture, while upon others a
better effect will be had by applying it thin, that is, more medium and less color.

## Material and Designs.

At the present time, lustra painting is done more on plush and velvet, although it can be done to look well upon any fabric. The material can be obtained with the design already drawn and prepared for filling in with colors; or it can be procured plain, and the design transferred to it from a transferring design.

Select, especially for your first attempt, from these transferring patterns, one representing some single-petaled, flat flowers, with well-marked leaves, or brilliant autumn leaves. The outlines of the different flowers and leaves should be separate and distinct, leaving agreeable forms of background between, the figures not overlapping or massed.

## The Process.

We think it will be more satisfactory to the decorator to make her first attempt on some waste material. Fasten the material to your open frame, or pin it firmly on a dra wing-board.

A little powder from any one of the bottles should be put upon the palette, the liquid medium added, and the two ground together by rubbing with the palctte knife until a perfectly smooth liquid is obtained. Do not hesitate to use the liquid medium freely, as the color should be quite wet when it is applied.

The lustrous paints may be laid all over the surface of the design. You are not to attempt, in color, any absolute imitation of nature, but your taste will lead you to a pretty adaptation of the colors. For instance, poppies may be represented with flaming red gold; lilies, with silver, etc.

Lay the lustrous color you have chosen with a serubbrush well over the petals of the flower, rubbing the liquid well in. This lustrous paint is to serve as the under-tone, like Chinese white in body-color painting. You are more likely to get on too little than too much, as you want thick, brilliant effects. When this is done, your whole design will appear in flat, lustrous tints, as if cut out of different tinsel papers. The medium is of such a nature that it dries quickly ; and by the time you have covered all the design you can probably work again on the first parts.

The lights and shadows may be worked in as the fancy dictates, using the light lustrous colors for the high lights, and the darker colors for the shadows.

Another method is to use the dull paints for modelling the flat under-tone spoken of above, and also for heightening the effect by giving some repose from the shiny nature of the lustrous surface. The paints can be laid on top of the lustrous ones, leaving these to represent the local color, and the high lights may be given by touches of pure white, or whatever color harmony may suggest. You will find that, in spite of their brilliancy, the lustrous paints are lower in value than others, although I have called these "dull;" for instance, pure white will heighten silver,
bright yellow will appear lighter (in value) than gold. On the other hand, "dull" crimson lake will appear to shade the brilliancy of the lustrous red gold.

You have only to try a few experiments with the colors to understand what I mean. You may very much emich the lustre of the lustrous paints by overlaying them with touches of the dull ones.

Paint stems and tendrils with the sable brush, either with lustrotis paint lined with dull, or exactly the reverse; do not attempt very fine lines, as they are not effective.

Instead of covering the whole surface, as I have just described, with lustrous paint, you may work as in Kensington or other velvet painting, leaving the material you are working on to tell as a darker part of the design ; using lustrous paints for the bright edges of the flowers or leaves, and marking the ontlines where you like with dull paints of tints suited to the metallic ones they are near. On linen and such materials no under-tone is required. Use both lustrous and dull paints as your fancy dictates.

The dull paints in my box are blue, red, yellow, and emerald green. The first three, being primaries, may be combined to make purple, orange, and green, but emerald green cannot well be made by combination. White and black are needed for finishing touches. The lustrous colors are so rich in themselves that they need not be combined with each other; use each direct from its bottle, well mixed with the medium.

While you will probably like to use the lustrous paints with great freedom, only retouching with dull paints, you will find that it is very pretty to use the lustrous ones
merely as accessory to ordinary flower-painting. For this you will require a greater range of the dull paints than is allowed you in this box. They are powder-colors, easily procured and easily managed, combined with the lustra medium. You may enhance their effect with bright touches of lustrous paint.

## Another Method

by which a considerable saving may be made in the quantity of metallic colors to be used, and with better effect, too, is to lay a foundation with water-colors before applying the metallics. Proceed as follows. We will suppose that the design has been outlined on the material to be painted: now, with a coat of water-color, fill in the outlines; that is, all of the space inside of the outlines is to be covered with a flat or even coat of color; paint over this with lustra colors.

This foundation of water-color paint may be Chinese white, or a color to match the tint of the material to be painted upon. If Chincse white is used, lighter as well as brighter effects will be produced by painting over it. If the foundation color be made to match the material to be painted on, the effect will be similar to what would be obtained by painting directly upon the material. By this method a very small quantity of lustra color can be made to produce more satisfactory results than a larger amount will do by the old way. If the water-colors are mixed too thin they will sink in and not show when dry - they should be applied quite thick.

After painting, do not fail to wash out your brushes,
first in turpentine, and afterwards with soap and water; and to have them thoronghly clean when you begin to work the next time.

## General Remaliks.

By reading the previous directions, the reader will see that there are several methods for painting with lustra colors, viz.:-

1st. By completely covering the design with lustra colors, and afterwards working in the lights and shadows with darker or lighter colors over the first painting. By this method an extravagant use of the metallics is demanded.

2d. By mixing the bronze colors thin - that is, more medium and less color-and applying it so that the material painted upon will show through and form the shading.

3d. By using the dull colors in connection with the bronzes.

4th. By filling in the outline with a foundation of water-color paint and applying the lustra colors over it. This method involves the most economical use of the bronzes.

It will be observed that we speak of lustra colors both as bronzes and metallics; they are simply different names for the same thing.

In working on plush, velvet, and other delicate materials, the hands should not be allowed to rest upon the work so as to crush the pile or otherwise disfigure it.

Do not fold or crease the work, or attempt to decorate on plush, velvet or silk which has been creased. If occa-
sion requires a transportation of work in process of painting, or after it is completed, it should be rolled, not folded.

It is not supposed that any attempt will be made to follow nature in lustra painting, excent in a general way. Consequently liberties may be taken which would not he allowable in any other style of painting - thus, flowers growing on the same stalk may be painted differently, etc.

In shading or blending, do not cleanse the brush of the previous color, but keep right on with the second ; the old color left in the brush will assist in mingling the two together.

Dry lustra colors are sometimes used to obtain high lights, or especially brilliant effects. They should be aprplied with a dry brush over colors previously laid on. Of course, they must be used in this way before the first color has had time to dry.

Lustra colors are more effective on black or dark grounds.
During painting, it will be found convenient to have a cup partly filled with turpentine at hand; it will be found useful in cleansing brushes, removing spots from the hands or material, etc.

It will assist one in painting to rinse out the brushes occasionally in turpentine, to prevent their becoming clogged; and when the painting is finished for the day, wash out the brushes thoroughly with soap and warm water. If they are left to dry without proper care, they will be unfit for further use; whereas by giving them proper attention they can be made to last for a long time, and to improve by use.

Lustra painting may be done by artificial light as well as by daylight.

```
OIL AND WATER-COLOR PAINTING.
```

LustrA Colors may ine used on

```
```

LustrA Colors may ine used on

```

All textile fabrics, which include silk satin, phush, velvet, etc., viz.:-

\section*{LINEN.}

D'oylies, napkins, etc.
COTTON.
Momie-cloth, bolting-cloth, muslin, jean, nainsook, satine, cotton-velvet, etc.

\section*{WOOLEN.}

Broadcloth, flannel, felting, cashmere, billiard-cloth, etc., can be painted upon.

MISCELLANEOUS.
Straw hats, straw matting, crazy patch-work, ete.

\section*{INLAID PAINTING.}

\section*{Note to Chapter XVII.}

Materials the same as in the previous chapter.
After this book was in type, and while Miss Hale was absent, the following chapter was prepared by other hands and from different experience. We have printed the chapter just as it was handed to us, with these comments.

We think the writer, in her enthusiasm for "Inlaid Painting," rather overstates the difficulties of the old method. While we think that the now style may be more easy of execution, inasmuch as the rough surface has been changed to a smooth, there is no doubt but what those who have never before attempted any style of painting can succeed satisfactorily with the first method.

The water-color foundation described in Chapter XVI. will apply to "Inlaid Painting."


\section*{CHAPTER XVII.}

\section*{Inlaid Painting.}

The multitudes of people everywhere seeking for something to do in decorative art which will not require a long and tedious study to enable one to produce satisfactory results - in fact, something that they can "sit right down and do without learning how" - will find a very near approach to it in Inlaid Painting.

This art, requiring but a slight expenditure of time or money in comparison with the remmeration it can be
made to afford, is really quite charming, one of its greatest attractions being the ease with which it is acquired and its facility of execution. Another advantage is the rapidity with which it can be done, in comparison with embroidery, oil-painting, or, in fact, any other form of decoration.

The desigu being already prepared and executed in the material, there is, of course, no drawing to be done. It is work which can be taken up at odd moments or at any time, and left unceremoniously without disadvantage. It may be done in the eveuing by artificial light as well as by daylight, which will recommend it to those who have no other time but evenings to do such work in.

There are no exasperating delays in waiting for colors to dry before others can be applied, and, above all, lustra colors appear in their superiority when displayed on plush and velvet in the style here introduced as Inlaid Painting.

The advantages embodied in this method of painting are not nullified or rendered inoperative from any lack of opportunity for use, as there are innumerable really useful and ornamental things which can be made from it, which will be thankfully received as presents, or find ready sale if made to realize moner from.

The painting is done on plush and velvet, prepared by Mr. Tilton especially for the work, by crushing, or, as it were, inlaying the pattern with the material. Under ordinary circumstances, plush and velvet are the most difficult as well as the most unsatisfactory of all fabrics to paint upon. Even those who have had long experience in the use of colors object to them, while a prudent beginner
would hardly attempt to work on such difficult and unreliable surfaces. The reason for this is that the long pile or nap renders it peculiarly troublesome to operate upon, either with pencil or paint. Even after the design has been drawn or transferred, it will be found almost impossible to control the paint so as to obtain clear and sharp outlines, and the whole work presents a matted and jagged appearance, besides absorbing paint in quantities out of all proportion to the space covered. Of course, the work is done, but in quite a limited way, because of its many difficulties.

By the inlaying method, all of these difficulties are at once removed. There is no drawing or transferring to do, as the design has been set in the material, and in the process those portions of the fabric which are to receive paint have been transformed from the most difficult of all fabrics to work upon with colors to the most simple and enticing. Instead of requiring large quantities of paint to scrub in, as in the former case, the most brilliant and effective results from inlaid painting with lustra colors will be obtained by applying the paint sparingly to the parts which have been inlaid to receive them; thus obtaining all of the advantages of plush and velvet painting, without any of the disadvantages.

Proceed as follows: After selecting a design, pin it to the drawing-hoard, with blotting-paper between it and the board. The object in using blotting-paper is to prevent the material from sticking to the board, and to absorb any of the medium or paint which may penetrate it. The methor previously given for painting with lustra
colors applies to plush and fabrics having pile or nap in their original condition (that is, not prepared for inlaid painting), and must not be confounded with the instructions we now propose to give for fabrics which have been prepared for inlaid painting. Betweeu these two methods there is a witle difference, and a knowledge of both will enable one to understand how to paint with lustra colors on any fabric.

In painting on plush and velvet after the old style of lustra painting, the colors must be mixed quite thick, and considerable quantities are consumed in the scrubbing or rubbing-in process, which is required to produce effects; while for inlaid painting the colors should be quite thin; that is, more of the medium and less of the bronze being used, and laid on (not rubbed in) quite sparingly. Their application is quite similar to the method of using watercolors on paper.

In the old form a bristle brush is employed, so that the colors may be scrubbed or rubbed in, while inlaid painting requires no such harsh treatment. The colors can be applied with oil-color sable brushes; numbers two and four are very good sizes for all ordinary work. We have tried camels' hair brushes. but they are too soft and yielding to be effective.

The results produced by these two methods of painting which have been described are quite different. The process of scrubbing-in is apt to destroy the irridescent or opaline quality which constitutes one of the chief beauties of lustra colors, giving instead a hard, metallic look not at all agreeable to the eye; while the method of inlaid paint-
ing preserves the colors in all of their natural brilliancy and irridescence. We have before us at this writing the same design worked out by the two methods, and notwithstanding the first was done by a teacher who has had years of experience with color, and the inlaid by a young lady just commencing, the latter has attracted the greater attention and admiration. This comment is not intended to discourage the old form of lustra painting, but to show that brilliant results can be obtained from inlaid painting without a long and perhaps tedious course of practice by those who may not have the time to give to decorative work.

Mix but a small quantity of paint at a time, as follows: pour a few drops of medium into a tinting saucer, and add the bronze ; it will be impossible to give the exact proportions - a little experience will be the best teacher. The mixture should be quite thin; that is, the medium must not be made thick with bronze, but only enough added so that when applied to a fabric it will sparsely cover the design and allow the material to show through. This is desirable for producing certain effects. A second application or painting will completely cover any parts requiring to be fully covered. One great trouble with beginners is that they use too much bronze in mixing, and load it on to the design. This has a tendency to destroy the effects which these colors are intended to produce. It is possible that some may prefer the loading process ; it will require no especial instructions. Our object is to avoid it, as we think that the beauty of lustra colors is their irridescence, and to preserve this requires as much care in mixing them as in laying them on.

We give below a list of some of the designs which have been prepared expressly for "Inlaid Painting," their dimensions, directions for painting, and the uses which can be made of them.

\section*{No. 1. Datsy. Dimensions, \(7 \times 4 \frac{1}{4}\) inches.}

Directions for painting: - For the petals, either gold or silver may be used. Silver will be more effective on dark material. Begin at the extremity of the petals, with the brush well charged with color, mixed thinly, that is, considerable medium with less color than would be used in ordinary lustra painting; draw the brush lightly toward the centre of the flower. The effect of this will be that the material will show through and assist in the shading. With another coat go over the extremities and outer edges. This will give depth instead of a flat appearance. If silver has been used, fill in the centre with lemon and orange. Use the orange over the lemon for the darker shading. The centre can be made more brilliant with flitters if desired.

For the leaves, use green, mixed as above directed, laying it on heavily at the edges, and working lightly to the centre of the leaf, leaving a line down the centre for the veining. The veining can be done with flitters or dry bronze powder, first painting with a coat of medium the space left for veins, so that the powder will adhere. For this, use a fine brush. The stems may be green or a darker color.
\[
\text { No. 2. Narcissus. Dimensions } 7 \frac{1}{2} \times 4 \frac{1}{4} \text { inches. }
\]

Directions for painting: - The method will be the same
as in former directions; that is, the extremities and outer edges heavier, working lightly towards the centre.

Leaves, green.
Petals of flower, white - silver. It will be observed that several of the petals curl so as to show a portion of the under side. This is indicated in the desigu by a line in the petal. The curled-over part should be painted heavier or thicker than the other parts, while directly under the curled part the color should be applied very lightly, allowing the material to show though and form a dark shadow.

The centre, paint with copper first; afterwards, paint the outer circle of the centre with orange.

\section*{No. 3. Azalea. Dimensions \(7 \frac{1}{4} \times 4 \frac{1}{4}\) inches.}

Directions for painting:-The method will be the same as in former directions; that is, the extremities and outer edges heavier, working lightly toward the centre.

The flowers are either pink or white. White is usually the more effective. If white, use silver; for red, scarlet; following the same general directions for curled leaves as in the narcissus.

Stamens, gold.
Leaves, green. It will be observed that some leaves overlap others. In all such cases the leaf ncarest to you should be painted with more color than the leaves behind it. The distunt leaves can be made to appear darker by using less color, so that the material will show through and form a shadow.

Stems, copper.

No. 4. Poppy. Dimensions, \(7 \times 4 \frac{1}{2}\) inches.
First, paint the flower petals with the dull red from the box, mixing it with the medium; over this, paint with the metallic scarlet. Care must be used not to get too much color on the centre and lower portions of the petals. Follow the same general directions for applying both colors which we have before given. This will throw one leaf up from another, and give a deep, full appearance.

Leaves, green. First, however, paint them with a coat of silver, and over that with green. The silver will partly show through, giving the leaves that grayish color seen with poppies.

The dots in the centre may be green.
Buds and stems, green.
No. 5. Apple Blossonis. Dimensions, \(5 \times 4 \frac{1}{2}\) inches.
Directions for painting: - The method will be the same as in former directions; that is, the extremities and outer edges heavier, working lightly towards the centres.

Flower petals, white (silver), edged with pink (scarlet). Outside petals, scarlet.
Stamens, either gold or copper.
Centre of flower, a dot of green.
Buds, scarlet.
Leaves, green.
Stems and branch, copper.
In painting the branch, one side should be heavier than the other. That is, cover one side completely, so that the material will not show through, while the other side may
be put on thinly, allowing the material to show through and assist in shading, or the entire branch may be painted with thin color, and a second coat over one half of it, which will produce the same effect.

No. 6. Wild Rose. Dimensions, \(5 \frac{1}{4} \times 4\) inches.
Directions for painting: - The method will be the same as in former directions; that is, the extremities and outer edges heavier, working lightly towards the centre.

Flower petals, scarlet.
Centre, green, with dots of orange around it.
Buds, red - scarlet.
Leaves and stems, green.
The small star-flower may be painted with a gold center and silver petals.

No. 7. Rosebuds. Dimensions, \(7 \frac{1}{2} \times 4 \frac{1}{2}\) inches.
Directions for painting: - The method will be the same as in former directions; that is, the extremities and outer edges heavier, working more lightly toward the centre. The buds may be painted with either red (scarlet), white (silver), or yellow (orange).

Leaves and stems, green.
No. 8. Woodbine. Dimensions, \(5 \times 15\) inches.
Directions for painting: - The method will be the same as in former directions; that is, the extremities and outer edges heavier, working more lightly toward the centre. In painting the woodbine, nearly if not quite all of the lustra colors can be used on the leaves. One may follow
his own fancy in selecting the colors. It will be well, however, to finish each cluster of leaves with the color it is begun with.

Berries, purple; lights, silver.
Stems and tendrils, scarlet or copper.

\section*{General Remaris.}

The directions for painting "The Daisy," No. 1, are - given more in detail than in those which follow, and as the same principle will apply to all, there scems to be no need of repeating the same thing in each, and we refer from all to No. 1 for general method.

In painting leaves, a very pretty effect can sometimes be produced by blending a contrasting color.

The method of painting in a foundation with watercolors, referred to in the latter part of Chapter XVI., may be practised with equally good effects in this style of painting. Another way will be to underlay every thing with silver. We think Chinese white will answer quite as well, however.

In this same book, under another heading, dircctions are given for painting with opaque water-colors. All of these "Inlaid Designs" may be painted in that way in imitation of nature, and afterwards touched up with lustra colors so as to be quite effective. Or they can be painted over entire with a very thin coat of lustra colors, with good results.

The Inlaid Designs may also be painted in the regular way, with cither oil or water colors.

\section*{What to do with Articles which have been Painted.}

The above materials, after being painted upon, can be made into almost innumerable articles, including, -

Panels for clocks, thermometers, calendars, door-panels, etc.;

Brush-cases, slipper-cases, umbrella-cases, shaving-cases;
Bags of all kinds, rag-bags, shopping-bags, tobaccopouches;

Mantel-shelf scarfs, lambrequins, curtains, portieres, clock-scarfs, bracket-scarfs, piano-covers, furniture-covers, fireplace-curtains, window-curtains, sofa-cushions, clockcarpets;

Baskets, catch-alls, clothes-baskets, work-baskets, wastebaskets, wall-pockets;

Banner-screens, haud-screens, folding-screens, fire-screens, tea-screens;

Toilet-covers, toilet-sets, bureau-sets, pin-cushion mats, tidies, pillow-shams;

Glove-boxes, handkerchief sacks and boxes, key-boards, tea-cosies, watch-cases;

Table-mats, d'oylies, side-board covers, easel-scarfs, mirror-scarfs, picture-scarfs, tray-covers, duster-covers, table-covers;

Shawls, carriage-shawls, baby-carriage outfit, slumberrobes, dog-blankcts, wall-frieze;

Lamp-shades, slippers, fans;
Bell-pulls, rolls for feather-dusters, duster-cases, blottcrcovers, music-rolls, satchcls, book-covers, frame-borders, portfolio-covers;

Christmas and New Year's cards, Valentines, Easter and birthday-cards.

For other information see Chapter XXIV., What to Decorate.

\section*{TAPESTRY PAINTING.}

The list of materials required for Tapestry Painting will be found preceding Chapter XI., of which this is a continuation.

218


\section*{CHAPTER XVIII.}

\section*{TAPESTRY PAINTING.}

The process of tapestry painting with the durable water colors described in Chapter XI. is an imitation of the old woven tapestries. These were in vogue in remote times for the decoration of walls. The ancient tapestry was woven by the so-called "high-warp" loom; in this process, the design was fastened across the front of the warp, and traced in color on the back, thus reversing the picture to be copied, which is then worked out always from the
back, so that in front the design appears exactly reproduced. The Roman theatres had curtains of such tapestry, of which the modern drop scene is a relic. The manufactory had fallen into decay before the twelfth century, when it was revived, and began to thrive again, especially in Flanders. It was also made in Paris, but the products of Brussels and Arras were preferred; in fact, the name of the latter place became transferred to the work, as we know from Polonius "behind the arras" in Shakespeare. The famous tapestries for the Sixtine Chapel of Leo X., for which Raphael drew the cartoon, were woven at Brussels. Leonardo da Vinci had already made tapestry designs; and Raphael and his pupil Giulio Romano also found them wortliy subjects for their skill.

The royal factory of Gobelins, in Paris, originated as early as 1450 , when Jean Gobelin erected a dyeing establishment on the banks of a little brook rumning into the Seine. This was combined by his successors with a manufactory of tapestry, which had acquired such a high reputation by the middle of the seventeenth century that Louis XIV. caused the establishment to be purchased by government, and carried on at the public expense. The manufactory was found, however, to yield profits totally inadequate to the expense of its maintenance. It was therefore converted into an establishment to supply the family of the reigning monarch with the choicest fabrics of art, which were also presented, as gifts, to foreign courts, ambassadors, etc.

Contemporary with the Gobelin tapestry was that of Beauvais, upon low-warp looms, of which the process
slightly differs from the other, with less valuable, though beautiful, results.

As tapestry, therefore, has for its object to copy works of high art with textiles, in order to have the strength and durability of woven stuff, it seems most unsuitable to imitate the process with paints, transferring the defects and faults of the process into the realm of art. It is like translating a translated book back into its original tongue, and with it all the errors which may have crept into the first transcript.

However, with the advisability of the practice we have not now to do. This is the way it is done.

Canvas can be procured, woven with yarn, prepared for this kind of painting, with an especial affinity for the liquid colors.

It should be stretched on a frame so that the strands, or ribs, are kept straight, and parallel to the edges of the stretcher. This can easily be done, with ordinary care. The canvas should not be strained too tightly. The brushes are the scrub brushes already described (also called Poonah or stencil brushes), with several bristle brushes to lay in small tints and fill in corners up to outlines, not manageable with the scrubber. One brush may be used for all the various reds, another for the greens, etc.

The design may be pounced upon the canvas, or transferred by Tilton's transferring method, from a good watercolor design, previously prepared. As the object is to reproduce ancient tapestry, the design had best be copied from some old, authenticated piece. If you like, you can imitate the worn places and defects, and try to reproduce
the faded dulness of the colors ; but, as the especial characteristic of the tapestry colors is their brilliancy, you will do better to aim at restoring the brightness of your copy, as it came fresh from the Gobelin loom some two centuries ago. Landscapes are the most characteristic subjects for tapestry, with much movement of knights, fair dames, horses, pet dogs, in the foreground, all in rich dresses and bright colors.

The design, once upon the canvas, is outlined with a sable brush and the colors appropriate to the tone of the object to be painted; thus, for the foliage of plants, a green tone is used, the trunks of the trees and foreground details may be burnt sienna. The colors should be diluted with water, as they are very strong and brilliant in the bottle, but do not make them too pale ; for, as the colors become paler in drying, it is desirable to make every tone deeper than that of the copy. Several washes of the same tone may be overlaid to obtain the various depths of value desired for the lighest light, the local color, the defining tone, or third value, and the deepest darks, or "touching up" tone for the final markings.

These directions, with ordinary knowledge of color and some little experience in landscape painting, will enable you to produce the required effects, only remember that you are not imitating nature, but the stiff forms of an ancient picture and the tints of faded wools. A peculiar faded grade of the greens and an unnatural burntsienna yellow should pervade the work, plants out of proportion distinguish the foreground, and impossible rivers running under impracticable bridges. In this description,

I am not criticising the highest tapestry work from designs of Raphael or Da Vinci, but the average excellence of old tapestry landscape. If you wished to copy the Sistine Madonna, I cannot imagine that you would choose to represent it translated into-woven tapestry and back again with pigments.

Do not try to conceal the ribs of the canvas, but paint along the lines of it when possible, as if working a row of stitches. In examining tapestry, you will see that the outlines are always upright, pointed, sometimes tapered, but always with a vertical tendency, not slanting, and never curved, the result of the ribs, or lines, in which it is woven. For the same reason, the tones are in separate values, as Berlin wools are in skeins, and this effect should be imitated.

The following list of colors contains those best suited to imitate the tints of ancient tapestries:-

\section*{BLUES.}

Cobalt.
Turquoise Blue.
Ultramarine.
Prussian Blue. Indigo.

\section*{BROWNS.}

Sepia.
Raw Umber.
Cassel Earth.
Burnt Sienua.
Red Brown.
Vandyke Brown.

REDS.
Carmine.
Rose Madder.
Carmine Lake.
Vermilion.
Red Lead.

GREENS.
Vegetable Green.
Emerald Green.
Prussian Green.
Sap Green.
Olive Green.

PURPLES.
Violet (bluish).
Purple Violet.

YELLOWS.
Chrome.
Golden Yellow.
Cadmium.
Raw Sienna.

\section*{PAINTING WITH WATER-COLORS} on

\author{
MUSLIN AND OTIIER SEMI-TRANSPARENT TEXTILES, SATIN-FACED JEAN, SATEEN, LACE, AND RICE PAPER.
}

\section*{MATERIALS.}

The textile fabrics mentioned in the following chapter:

> Drawing Board or Frame.
> A set of Water or Liquid Colors, Chinesc White.
> Blending Fluid. A Number 3 Lead Pencil.
> Brushes.
> Gelatine. Gum Arabic.

\section*{GENERAL REMARKS.}

In undertaking to paint on any new fabric, the prudent worker will give a short time to practise on some waste material before begimning with the real work, so as to become acquainted with its peculiarities. It will not be difficult to acquire the knack of painting on muslin, although the first attempt may not be successful. In the following chapter the reader is directed to stretch the material in an open frame; a hoop frame, such as is used in embroidery, will answer. They can bc bought at the embroidery store; or one can very easily be made with two hoops, one just fitting into the other. Lay the mate-
rial over the smaller hoop, then fit the larger one over it, as a cover fits its box, which will secure the muslin and stretch it at the same time. In this way an opportunity will be afforded to work on both sides of the material, if desirable; and if gelatine is used, as hereafter described, it will be free to dry without sticking to anything, as might be the case if stretched to a drawing-board.

The design may be drawn or traced on the material either before or after stretching; but we think it will be found more convenient to do so before it is stretched : and if it is to be painted on both sides the design should be drawn on both sides, which can be done quite easily as follows: after drawing on one side, turn the material over, laying it upon a white surface, when the lines which have been traced on the other side will show through, and can be marked over without difficulty. The frame, however, is only practicable for small work. When large pieces are to be painted it must be dispensed with, and some smooth board of convenient length be substituted. This should be covered with white paper, and over it stretch the material with the design traced upon it.

In the instructions for painting on muslin, the reader is told to first paint over, or fill in, the outlines of the design with Chinese White, the object being to obtain a foundation to work upon, as it will be found quite impossible to paint directly on the material, with thin transparent colors, without danger of their spreading and becoming unmanageable. We would suggest to the reader to use a gelatine size in place of Chinese Whitc, made in the proportions of one ounce of gelatine to a pint of water,
viz. : first soak the gelatine in cold water for half an hour, then pour off the cold water and add hot, stirring till all is dissolved, and apply before it is cool. This will give a foundation which can be painted upon freely without danger of mixing with the colors. It can also be painted on both sides, and has the advantage of being transparent.

Whichever medium is used, Chinese White or gelatine, it must not be allowed to dry while stretched to the board, as it would stick. If a large piece of work is to be done, fill in a part of it; then, while still moist, loosen the lower part of the material from the board, and hold it by each side up from the board, until it dries, keeping it stretched between the two hands, so that it will not cockle when dry. It may then be fastened again to the board, and the work continued until completed. When the foundation is all laid and dry, it may be painted as directed. Color may be dropped into the gelatine size before dry, with the same effect as in Chincse White. The reader will of course understand that there is a great difference in muslin. It can be found sheer (without sizing), and also so highly finished or sized as to require no preparation or foundation for painting. Our remarks apply to material unsized.

The difficulty in painting on such fabrics is to keep within the outlines and to lay the color smoothly. Use but little color or size in the brush when applying them to the material, and practise first on some waste material like that it is intended to paint on.

\section*{PAINTING ON SATIN-FACED JEAN OR SATEEN WITH WATER-COLORS.}

Satin-faced jean or drilling is a thick cotton cloth with one side satin faced. Sateen is similar, but perhaps not so thick. The difficulty in painting on them is to keep the colors within the outlines of the design to be painted. There is so little sizing in the material that the colors will run and spread if applied directly. If a sizing is first applied, it will be just as difficult to keep it within the outlines ; and if that is done successfully the trouble will not be removed, because it will be necessary to \(j u s t\) cover the sizing which has been applied with color; and in doing this there is danger of the colors ruming if it overlaps the sizing ever so little. This we learned ly actual experience, and, carrying our experiments still further, we found that a sizing made with gelatine and gum arabic could be applied without spreading; but when the color was laid over it, it (the color) would run as before. We then mixed the size with the color, using it (the size) in place of water, and found no further trouble from ruming or spreading. This size can be made as follows: Dissolve one teaspoon level full of powdered gum arabic with four teaspoonfuls of hot water, and add to an equal quantity of gelatine size prepared as previonsly directed. Use hot in place of cold water, and apply as in water-color painting. Another advantage in using this sizing is, that, as gelatine is not soluble in cold water, a few drops will not
mar the design if spilled upon it, and allowed to dry without being disturbed.

Muslin, for which directions have been already given, may be painted in the same way.

\section*{PAINTING ON LACE WITH WATER-COLORS.}

The same size, mixed with color, can be used for painting on lace, instead of gelatine and Chinese White.


\section*{CHAPTER XIX.}
1. MUSLIN AND OTHER SEMI-TRANSPARENT TEXTILES.

There is a new material called silk bolting-cloth, used in the finest processes of flour sifting, which is very lovely in appearance, and, being firm as well as fine in texture, is admirable to work or paint on. It is thicker than Swiss nuslin, but thin enough to give the same half-transparent effect.

For all such thin materials, painting has the great advantage over embroidery that both sides are presentable, although the one on which the paints are applied is, of course, the brighter and more finished. The back of a piece of embroidery, however neatly managed, is better out of sight, and, therefore, in general, requires to be lined. No such disadvantage attends painting; and very pretty
fans, hand-screens, transparencies, chair-backs (or tidies), aprons, and even dresses, may be thus ornamented. The work is done in water-color, and is not difficult, requiring care and accuracy, and, above all, neatness in exccution.

The muslin should be stretched in an open frame. Having previously put your design upon cartridge paper, lay the frame down upon it, and carefully trace it on the muslin with a No. 3 lead pencil.

There are now two methods of working.
1. Paint over all the design with Chinese white, mixed with a few drops of Blending Fluid or Resisting Medium. The laying on of the white, as in all other cases, is the great difficulty, especially in muslin painting. If it is too liquid, it will run over the outline, and spoil the work; if it is too dry, every brush-mark will show ; if it is lumpy and full of spots, the rest of the painting will look coarse; and, as no mistakes made in laying on the ground color can be altered by the succeeding work, it is extremely important that it should be done well. Each petal or leaf should look as if cut out of one smooth piece of shiny paper, and stuck upon the material.

As the prevailing chalky tint of Chinese white will always obtrude itself, it is better to change it, even in this under-tone, with the local color of each olject in the design. To avoid a number of separate spots of prepared white on the palettc, you can drop, this local tint into the white already on the design with a brush filled with transparent color. But this is delicate work, especially on muslin; and the beginner may cover the whole design with white, reserving the tinting for the second process.

When the white is dry, paint over it with ordinary water colors, keeping their natural tones as far as possible, which are always somewhat degraded by the mixture of white ; therefore, touch the under-tone lightly and quickly, not to stir it up with the point of the brush. Finally, the highest lights may be added in sharp, clear touches of white, mixed with the proper local tint.

Like all work done on a prepared surface, anything like retouching or stippling must be avoided, and broad effects and good drawing relied upon.

Hand-screens may be painted on both sides; in this case, the open frame must be turned round, the Chinese white laid on the back of the design, great care being taken to follow the same lines as on the front, and then painted as above.
2. With Tilton's liquid colors you may work upon all semi-transparent materials by scrubbing in the color with a scrub-brush, and afterwards delicately defining the outline with a pointed sable brush, either with the same color as the petals and leaves, or with some uniform dark color. Or, calling in the aid of embroidery, you may define the edges and markings with outline stitch in embroidery silk.

\section*{II. Painting on Jean in water-colors.}

This is a kind of work very pretty for decorating the small d'oyleys placed under finger bowls. It is done with moist or tube water-colors, or with body colors and Blending Fluid.

Use smooth, satin-faced jean, and cut it out so that no
crease may appear. The form may be round or square, with ravelled fringe. The same process may be used on little napkins, which come all made for the purpose; but jean is firmer in texture than ordinary damask, and so better to paint on.

Draw in the outline of the subject faintly with a lead pencil, from your design previously prepared on paper. Fill in the outlines with Chinese white, dropping in the lightest tint of each part of the design. When this first coat is dry, paint the natural colors upon it. It is, perhaps, best to put in all the shadows, in good forms, with a neutral tint, influenced in every case by the local color; this can be overlaid with transparent color, and finished with sharp, clear markings.

\section*{III. LACE.}

This work is an imitation of the old Creton laces, which were made with colored threads arranged as patterns upon a black or white ground. It is done with water-colors, and used for furniture lace, or as trimmings to dress fabrics.

Thin portières, which in small rooms are more agreeable than heavy ones, even in winter, on account of their allowing free passage of air from one room to another, may be made effective with this work upon a set of cheap white lace curtains with bold designs.

The colors are made fast by using Tilton's Resisting Medium, and, though they will not stand washing, will look well a long time.

Stretch the lace, and pin it down securely to a drawing-
board, a part at a time. The design will be the pattern woven into the lace, every part of which must be first wet with gelatine, and, when that is dry, washed with Chinese white mixed with the Resisting Medium. Thus prepared, you can paint the pattern with bright colors, tinting the leading lines of the design with brilliant colors, relieved by the secondary tint applied to the other part of it. The more broken up and diversified the coloring, the better the effect. Put on the colors flat, without any grading, and so thick as to be thoroughly absorbed into the material. The pattern on the lace should be wholly covered with colors, leaving the connecting threads white.

Instead of water-colors, you may use Lustra paints; and by a judicious combination of the lustrous and the dull ones you will produce a rich oriental effect.

\section*{IV. RICE PAPER.}

The Chinese paint deliciously on rice paper ; but, as it is not too much to say that we can never hope to attain their dainty touch and execution, and as the results are not very aseful in decoration, because rice paper is so fragile, it is hardly worth while to give it much space in this book.

As the paper is transparent, draw the cutlines of the design, either flowers, birds, or figures, upon common paper, ink this over, and put it beneath the rice paper. The outlines will show through. Fasten the rice paper down upon it with drawing pins, and paint without any outline on the rice paper, which will not bear pencil
marks. Put on opaque colors, the brightest you can find, in clear, bright tones, getting your effects at once, as little can be done by retouching. Over the first coat, when it is dry, markings can be made, and stamens and fine touches added, with bright body color or a little gold.

\section*{PAINTING ON GOLD PAPER}

\section*{WITII WATER-COLORS, AND ON GOLD CANVAS WITH OIL-COLORS.}

\section*{MATERIALS.}

Water-Colors: Brushes and Gold Paper. Oil-Colors: Brushes and Gold Canvas.


\section*{CHAPTER XX.}

\section*{PAINTING GOLD PAPER IN WATER-COLORS.}

What is known as "craped gold paper" is the best when large surfaces are to be painted, like friezes or dado panels ; and this can be painted upon in body water-colors. The craped or crinkled surface is prettier and easier to manage than smooth gold paper. It is about twenty-one inches wide, and is sold by the piece for wall-paper. Any colors may be used, with due taste and discretion, but a good effect is produced by using only the shades from light yellow to red-gold; the background being supplied by the gold paper.

Cut out the gold paper into just the shape of the space you mean to fill, and, having transferred some design upon it, well pinned down upon a drawing board, lay Chinese white, mixcd with Blending Fluid, over the whole surface
to be painted. Secure the edges first of each form, and fill in with the white. When this is dry, the different values of yellows can be applied over it. After this is done, make a fine, sharp line of sepia carefully round every edge of the design. This may be done with a broad, blunt pen, the color diluted just enough to flow, or with a wall-pointed sable brush. If the hand is steady, and the eye accurate, these outlines will be good with either instrument; without a firm hand and watchful eye, they will look ill, no matter what implement is used.

This painting can be pasted upon the wall like any wallpaper. A stencil-plate with some formal design of bordering can be applied to the places where it meets the wall, to break the hard line at the edges of the gold paper and assimilate it with the rest of the wall.

This material, also, is very suitable for Lustra painting, as described in Chapter XVI.

\section*{GOLD CANVAS IN OILS.}

Gold canvas is made of the ordinary picture canvas, which, instead of being coated with paint, is covered over with sheets of gold leaf. The best quality is gilded twice, and is therefore expensive, but it is very durable, and resists exposure to the air. Its surface is slightly rough, and makes a good background for broad flower painting, and still better for bold, well-drawn figures.

After transferring the design to the canvas, paint with ordinary oil paints and sable brushes, as on common canvas, but without attempting to go over the surface a second time, or to work up the design. Put the tints on at
once, and soften their edges while still wet, so as not to clog the canvas with too much color. Leave the gold as background.

Cabinets, corner cupboards, and mantel-pieces can have paintings upon gold canvas inserted into their panels, and the material is handsome for large folding screens.

\section*{PAINTING TRANSPARENCIES AND}

LANTERNS.

\section*{Materials.}

Strong Bleached Cotton Cloth. Crimson Lake.

A Wooden Frame.
Gelatine Size.
Oil Colors.
Ivory Black.
Flake White.
Permanent Blue. Raw Sienna.

Palette-Knife.
Bristle Brushes.
India Ink.
Sponges, Coarse and Fine.
Pumicestone.
Old Rags.
Quill or Stub Pen.


\section*{CHAPTER XXI.}

\section*{TRANSPARENCIES AND LANTERNS.}

Either oils or water-colors can be used in this kind of painting, which is useful for illuminations at public rejoicings, and also for hall lamps and piazza lanterns.

The effect of water-color painting is puor when compared with oil or varnish colors in this kind of work, which is to be seen by the light of a lamp shining from behind. If oil colors are not at hand, however, and it is desirable to get up a patriotic illumination in a hurry, water-colors, mixed with size - the same as used in preparing the cot-
ton cloth to rcceive the paint - may be used. Chinese white should be put upon the parts of the design in halflight or shadow, leaving the high lights to shine with brilliancy and the full power of their local tints. By thus making opaque surroundings, which will block out sharply the shapes of the light shining through the transparent places, a bright effect is given, but judgment is required not to overdo such opaque parts of the design, and thus turn the whole into a picture pretty by daylight, but impervious to the candle-light from within.

Otherwise, the directions for painting transparencies in water-colors are the same as with oils. For the latter the materials required are strong, bleached, cotton cloth, wooden frame, gelatine size, gilders' size, oil colors in tubes, bristle brushes, sponges coarse and fine.

The cotton cloth should be fine and good, but strong, stretched in a wooden frame made the size required for the transparency. The lantern should be constructed of four or more slight wooden frames, like those of a child's slate, fastened together with wirc eyes. Any carpenter can manage this; the fourth side should join by a little hook, that the lantern may lie flat in the daytime, as desired. It is best to paint the sides separately, and have them joined together afterwards. To imitate the bizarre forms of Chinese and Japanese lanterns, the maker must exercise her own ingenuity.

The cotton cloth must be tightly stretched, and sized with gelatine made by soaking onc ounce of gelatine, first, for ten minutes in cold water. Then pour off the cold water, and add one pint of boiling water, and stir till all is
dissolved; use hot, - to make it capable of receiving the oil paint. Two coats of size are enough, if upon trial the paint lies upon the surface of the cloth and does not sink in ; but if it should, add a third coat and let it dry. Rough places in the sizing may be rubbed down with pumice-stone. It is necessary that the cloth should be tightly attached to its frame. For a large transparency, tacks are best at the back; for a lantern, the cloth should be firmly glned to the frames and left to dry before painting:

Draw the design (always previously made with care and accuracy on cartridge paper) directly upon the cloth with Indian ink in a quill pen, or a soft "stub" pen. The colors and designs used in slides for magic lanterns are really the best guide for imitation in large transparencies, for nothing more detailed will have any good effect. Squeeze each color in a saucer, and mix it with the medium described at the end of the chapter, rubbing it well in with a palette knife. Use the brightest colors, and only transparent ones, and attempt only the simplest combinations. The three primitive colors - yellow, red and blue - and the secondaries - green, purple and orange - are best; and do not fear to have the outlines of your design sharply defined with black. Fill one of your little sponges with color and dab it on to the cloth as thick as is consistent with having some light shine through. You will find it quite amusing to work in this way at night, with gas or a candle behind. Remember that in this case your values are gained by more or less light shining through the colors. Thus the highest light or value will be the cloth feft white, or slightly tinted with bright light shining through
it. The darkest value may be black, caused by a coat of paint so thick that no light shines through. You can make your picture effective by only employing these two values, and one between, where the paint is put on just thick enough to show its local color by the light shining through. When a tint is nearly dry, you can take off some of it with the palette knife, to make lights and halflights in the shape required. For small spaces apply the paint with little dabbers made of a rolled-up rag, and the faces of figures can be done with round bristle brushes, relying for detail upon the pen outline with Iudia ink. You are not trying to imitate nature direct, but stained glass, which you will remember is set in leaden casements round each separate piece; so you need not fear the black outline, for the more conspicuous it is, the better your effect.

Landscapes look well, if broadly executed. An effect of distance can be procured by painting sky, mountains and remote objects on one piece of cotton, and figures and prominent foreground objects upon another laid over it.

In preparing the cloth to receive paint, the same sizing, viz., gelatine, may be used for preparing it to receive either water or oil colors.

The medium used for mixing with water colors may be the same gelatine size used in preparing the cloth, while for oil colors it will depend upon the skill of the artist. A professional artist, who fully understands the effects of colors and how to apply them, may use a medium composed of Japan, varnish, and a little turpentine - this is what is called a quick dryer. It dries so quickly that no
preparation is needed for the cloth, whereas oil, the base of all size mediums, used clear, is the slowest dryer. As the greater number of our readers will be amateurs, I should advise them not to attempt this style of painting until they have acquired some knowledge of colors, and the method of applying them, and then to begin with a slow drying medium, namely, drying oil mixed with a little Japan or varnish.

\title{
PAINTING ON WOOD AND LEATHER \\ with \\ OIL, WATER, AND LUSTRA COLORS.
}

\section*{materials.}

Prepared Wood and Leather. Brushes. Colors.
Turpentine.

Glue.
Gilder's Size.


\section*{CHAPTER XXII.}

PAINTING ON WOOD.

\section*{I. OILS.}

Painting upon polished wood, either plain or ebonized, or upon a gilded surface, is an effective method of decorating. There is no difficulty about the background, as it is furnished by the nature of the material. It is best when done flat, with a sharply defined outline, marked out with a fine line of brown paint. It is hard to transfer the design to wood; therefore, you had better
copy it carefully, taking all precautions to put it in the right place on the surface you wish to decorate. Use tube color mixed with turpentine, the quantity of which you must learn to regulate by practice. The turpentine takes away the shiny effect of oil, and gives a dead, flat appearance, which is the result intended in this sort of work. Paint all the broad surfaces with a plain tint of the right color; when dry, lay on shadow tints and a few high lights, but do not attempt to give relief and roundness, as it does not belong to this style of decoration. Mark out the details and chief outlines with a fine line of brown paint. You can, of course, paint upon this surface with oil colors as upon canvas, and omit the hard outline. This, however, is not the fashion at present. Good easel painting demands a painted background, and is simply wasted in wood decoration.

The background for wood painting may be an already painted surface, like the panels of doors within a room, or it may be prepared on purpose. Any ordinary house painter will do this better than an amateur, and you had best admit this, and let him do it. To decorate a room. flowers may be painted in a realistic way, with all the care and judgment you have at your disposition ; or landscapes may be attempted, with subjects well suited to the form of the panel which is to enclose them.

For long door-panels, an effective subject is some long, straggling plant growing up from the bottom panel, apparently behind the cross-work wood, reappearing above it, and so on to the top of the door. Remember that, in a room always lived in, these decorations are to be always
in sight; while the merits of the work continue to charm indefinitely, the faults become more and more evident, as time goes on, and more wearisome to the unhappy family which must contemplate them. A bad water-color may be taken down and put in the fire whenever it grows insupportable ; but a panel of a door must remain year after year. Therefore, my advice about painting a panel in your own drawing-room would be, Don't, unless you are sure you will do it delightfully.

\section*{iI. Painting in water-colors}
can be done with body color, or by applying a layer of Chinese white diluted with Tilton's Blending Fluid, just as in painting on silk and velvet. The same flat method as advised above for oils, with a decided, firm outline of brown or some dark color, is the best. This may be highly polished at a carriage-maker`s, to give a brilliant, inlaid effect.

The Lustra paints described in Chapter XVI. are very effective on wood; and the process differs in no way from that already given.

\section*{III. LEATHER PAINTED IN OILS.}

Stamped and gilded leather was a favorite material for hangings in the fifteenth century, and later. At the present time, painting upon leather has been revived for panel and cabinet spaces, and the effect of the raised and painted design upou a gold or silver background is very good.

The leather used is morocco. It is sold in skins, which
measure from twenty-one to twenty-eight inches in width, and somewhat more in length. The skin must be well moistened, and put under a stamping-machine with a design of figures, game, fruit, or some conventional subject. The leather already stamped and gilded, however, can be bought at an upholsterer's, which saves the trouble of both.

If you gild it yourself, size the background with gilder's size, and press the gold-leaf down on it carefully. Leave the pattern untouched; and when the background is dry, paint the raised parts in oil colors. The grain of the leather makes a good surface. Use sable brushes, and soften the paint into the leather, putting on as little paint as possible, and allowing. the local color of the leather to serve as one of your tints. If you have seen a nice piece of painted leather work, you can easily imitate it, observing that the effect is to tint the leather, not to overlay it with masses of paint. Put on only one coating of color, which is subservient to the leather and gilding. Dark colors and rich reds, with only very moderate high lights, are allowable.

When the leather is painted, it must be glued into its position with strong, hot glue. A slight wood moulding round its edges, fitted to the space it is to occupy, will finish the effect.

Lustra paints are very pretty for leather, as the metallic brilliancy they possess is well brought out by the material.

\section*{STENCILLING.}

\section*{MATERIALS.}

Stout Brown Wrapping or Cartridge Paper. Colors.
Stencil or Scrub Brushes.
A Square of Glass.
A Sharp Knife.


\section*{CHAPTER XXIII.}

\section*{STENCILLING.}

A kind of wall-paper called "Ingrain," also common brown wrapping-paper, "butchers' paper," and the dark blue paper used for wrapping cones of loaf sugar, are all capable of decoration. The back of the cheapest wallpapers is also of a good texture for amateur work. The natural shades of those papers are retained for backgrounds, and they can be combined to paper a room in such a manner as to break up the wall into dado, middle,
or friezc of contrasting or harmonizing shades, without any more expensive material.

For this object the coarser and rougher the paper the better the cffect. Arabesque or geometrical designs are the most effective, and to make them you must prepare your own stencil-plate, which is easily done, if you are skilful in the use of a sharp knife.

Select a good arabesque pattern wherever you can find it, enlarge it, if necessary, to the proportions suited to the wall it is to cover, and trace it on thick strips of brown paper, long enough to sccure the repetition once of the pattern, so that it may join accurately.

Lay this marked paper on a large piece of glass or tin, as the best thing to cut upon, and with a sharp knife cut away all the parts between the lines of the design, so that only those parts of the paper that form the background of it remain. As this is more puzzling than you think, in most arabesques, you will have been wise to roughly cover the design itself with a shading of charcoal, and then take care to cut away only the paper left brown. Before cutting out the design, see that no part of the pattern thus cut through will take away any of the ground with it, as will happen in the casc of a circle within a circle, for instance. It is best to choose a design that is all comected together, to avoid this trouble; in fact, only such are well adapted for stencil work; but you can, in troublesome cases, leave narrow bars of paper across the open parts (technically called "ties" or "tags"), which must be painted over after the stencil-plate is renewed.

Prepare several strips of the pattern, and make sure
that they will join eaclı other correctly, for the continuousness of the design.

Meanwhile your papers have been applied to the wall by a paper-hanger, who may be yourself, if the management of paste-brushes is among your accomplishments.

The color may be made with finely ground powder paints, mixed with glue size and water. Melt the glue size in a small quantity of hot water over the fire ; while hot, strain it through a coarse cloth, and then mix it with color until it is stiff enough not to run, taking care not to get it sticky with too much glue. One color is all that can be used with one stencil-pattern. Take a short stiff scrub brush in the right hand, and hold the pattern against the wall in its right position with the left land, fill the brush with paint and carefully rub it over the brown paper and through the openings in the pattern upon the wall, with a straight firm stroke, without streaks or lines. The pattern must be held very tight, or the paint will run under it and make an untidy jagged edge instead of a good line. This is why each strip of the pattern should be short ; you cannot control a large one with the hand, and should you fasten it with tacks or pins, the holes made by them would show on the wall.

Finish an arabesque border with a straight line also cut out of brown paper and stencilled on. This may be another color, and thus give varicty.

I advise using stencil patterns for all arabesque or geometrical designs of any size; in fact small ones can be neatly cut out with scissors. The practice insures accuracy, and if you have cut out a pattern, once for all you have
it, and are spared the fatigue of mind needed each time in copying a regular design to make sure of repeating it eorreetly.

All the rough papers above mentioned can be used for sereens, wall panels, and small objects, painted with oil colors in tubes the ordinary way. The rough paper takes the eolor easily. No painted baekground is required, as the natural tint of the paper supplies one, and there is no danger of the eolor spreading, as on silk, velvet, and other textiles.

Steneilling may be done also in water-eolors. The eost is trifling, as powder eolors, size, and water are all that are required. They ean be applied much more easily and quickly than oils, but are not so durable, and so should be used only in plaees not likely to be rubbed against, and dampuess is fatal.

Stout eartridge paper is best for making the patterns to be used in water color. The powder colors, as in the previous process, are the common ones produeed in an ordinary painter's shop, well and finely ground. They must be mixed with Tilton's Blending Fluid. The various shades of color are made by adding Chinese white to the different tints to make them light, with blaek to deepen them. The four colors ehiefly used should be indigo, Indian red, oehre, and white. They may be deepened and enriehed to produce various shades. Thus, eobalt blue is made light with white, and dark with indigo; Indian red is made light with vermillion, and dark with black. The eomplementary eolors can be used to their full effeet in this style of decoration. The simplest combinations are the best.

WHAT TO DECORATE.

\section*{CHAPTER XXIV.}

\section*{WHAT TO DECORATE.}

Having now described in general the method of working with transparent water-color, body color, and oil paints, I will give this chapter to some suggestions of what may be best done by the different methods, and which medium is the best for each bit of decoration.

And first, let me say, the greater the skill the less need of great usefulness in the object it is expended upon.
"A thing of beauty is a joy forever,"
and a slight design thrown by the hand of genius on a scrap of paper will be treasured after all the panels and fire-screens of iufcrior workmanship have gone up chimney. But if you paint only pretty well, you may compass a wall-pocket or an umbrella stand, which your friend will prize provided "she wants one dreadfully." Try not to give her a "dreadful" object, however, because she wants one dreadfully.

All the things executed on drawing-paper or cardboard, in simple moist colors, are pretty if they are executed prettily. Christmas-cards, panels, wall-pockets, hand-screens, all these things - their name is legion - will hold their own, provided they are executed with taste. Each year brings up some new whimsical application of design to trifling uses.

A panel, or a large Christmas-card should be painted in a realistic manner, as well as you know how. A little landscape prettily exceuted on a piece of drawing paper about \(5+7\) inches, and mounted on tinted card, leaving a narrow margin, with perhaps a pretty little bow of taste, tied with taste, is a pretty present. The designs for these need not be original, but they gain a certain sentiment if transferred from your own summer sketch-book, which may compensate for a lack of technical skill in their execution.

A little device, not yet too common, is that of a close bunch of flowers, nicely painted in a realistic manner on thick drawing-paper. For such things drawing-paper with the smoother surface is best. A design should be chosen which is compact, without any tendrils or projecting leaves, and having a positive bunch of stems below the flowers; and the colors should be massed well, that is, the flowers crowded together, not broken up, so as to look spotty with leaves interspersed, with some leaves below the flowers. It should represent such a little bunch of flowers as one would like to hold in the hand, like mignonette, sweet violets, or our spring Mayflower. After the bunch is painted, eut it all out with sharp scissors, follow-

ing all the indentations of the design ; it is in doing this that you will be glad to find the outline simple and requiring not too clelicate work for the scissors. Cut another piece of drawing-paper exactly the same shape, so that the two will fit precisely; tie them together with a pretty bow of narrow ribbon, to harmonize with the color of the flowers, and on the inmer surface of the white shape write whatever sentiment your heart may lictate, or your "Familiar Quotations" may afford, for the friend to whom the little gift is dedicated.

The custom of decorating smail volumes of poems with little water-color desigus is still pleasant, although its freshness is somewhat worn off, since the time when a few amateur artists hit upon it. You should choose not on!y a book of poems which lend themselves to small decorations, besides of course considering their literary value, but such as are printed on roughish paper with good broad margins. You will do well to pass a damp sponge over the whole page upon which you mean to put a decoration, although you may only paint upon a small part. After the whole book is finished, it may be pressed under heavy weights or in a copying-press, to remove the danger of curling leaves.

Restrain your decorations chiefly to the margin, but you may let a tendril or a wandering bee stray over the print, if you are using transparent colors; or you may let the trailing stem with its leaves scem to go under the stanzas and emerge between them. Feathers, birds, gaurly insects, butterflies, are snitable to decorate such books; the remotest allusion to the feathered tribe will justify your intro-
ducing a peacock's plume, if you know how to do it well. A little landscape with a distant sail will do for a "tailpiece" in the blank space, after ships have been even remotely mentioned, and so on. For the sake of individual sentiment, designs should be your own, original, but I would not have you "do them just out of your head," but copy them from designs you have previously made from nature, reduced to suit the space now to be filled.

In general, things that may be shut up and put away from dust and exposure may be painted on paper or card with transparent water-colors, on things intentionally evanescent, which may be thrown in the fire as soon as they cease to look fresh. You may use moist color upon white or pale surfaces of silk, satin, or velvet, for these will live in drawers where they will keep fresh for a long time; sachets, handkerchief sacks, glove-boxes, on palecolored surfaces, and all these articles are lovely if tastefully decorated aud well made up; more artistic, perhaps, painted than embroidered, although embroidery agrees better with the needlework required in completing them.

Things which must be washed cannot be painted in water-color, body color, or oils. Tilton's Liquid Colors are strong enough to stand moderate washing; but articles painted with them will have a sadly dilapidated appearance after washing, if their outlines are not enforced with needlework, in the same way that printed designs of cretonne are sometimes lined round with chain-stitch. The effect of this combination of needle-work and painting is very pretty, and beantiful curtains and bed-spreads will doubtless be made in this way, when the Liquid Colors
have fully established their reputation for firmness and permanence. Large flowers should be used for such purposes, like the "sprawling" desigus on old-fashioned chintzes. The degree of "finish" such coloring can bear can be well learned by studying effective bits of gay cretonne. Observe how sharp and clear the outlines of flower and leaf are, how distinct the separate values, how well shaped every space of color and of high light, which is often white cloth left uncolored, in such sharp, clear forms that it seems to bring that part of the work nearer the eye than the rest. There is no weak-minded softening of values, one into another, very little gradation even of tints. Perhaps you demand more blending of values into each other ; this may well be, but there should always, in your work, be a moment when it looks sharp-cut and clear like this; afterwards you may soften the sharpness, but take care not to lose the clearness. Perhaps you will object that you aim higher in art than to copy the mechanical merits of a piece of printed cotton; but I shall reply that you will do well to be able to imitate its excellences, and that after you have produced an original piece of work as effective and true to nature as a good piece of cretome, you may aspire to improve upon its execution in your own work.
"Splashers" or "wash-backs" are very pretiy, to protect the wall of a bedroom behind the washstand, done with washing colors, upon crash or something stout and strong. A yard-wide Turkish towel, cut in two, will make two wash-backs. The fringe and border hang down for the bottom of the wash-back. The upper edge must be
hemmed. An effective design is large, purple iris thrown across the space, laid in broadly with liquid colors, and worked round all the outlines with outline-stitch harmonizing in tone with the tints of the paint. As you can make two out of one large towel, one may be in the wash every week.

Many things of this sort readily suggest themselves to be done on white washing-material with liquid colors confined around the edges with needlework. Body color, or gouache, is more enduring than transparent color, for the reason that it is used on dark backgrounds, which do not soil so easily as the light ones required for transparent paints. Everything made of dark silk, satin, or velvet, may be best decorated with body color, unless it is to be exposed to much rubbing or roughness, which with these materials is not likely to be the case. All the things which are embroidered by artists of the needle may be as well decorated in body color with the same set of designs. In painting it is usual to be a little more realistic than with the needle. Embroidery is more permanent than body color ; on the other hand, the colors of silks and wools used in embroidery are more likely to fade than the tints of the paint-box. All water-color productions on wood may be covered with a thin coat of shellac, and thus in a measure protected. It is not very satisfactory to do this, as the process gives an artificial shininess to the coloring.

The catalogue of things that may be thus decorated is endless, limited only by the number and variety of straight lines in any room capable of receiving a border of silk or
velvet. Lambrequins, table-cloths, clock-carpets, bannerscreens, and the like, may all be gracefully ornamenter with strips of painted subjects.

For articles which cannot be put away on sweeping-day, taken down, shaken, folded up, and laid in a drawer, both body-color and transparent color (and, indeed, silk embroidery) are too delicate to be used in decorations. Panels which are permanently let into parts of the room, or into wall-cabinets, large screens made of gold canvas, decorations painted directly upon doors or window-frames, -all these should be painted in oils, which resist the attacks of dust-brush and broom, and bear the application of soap and water. The ugly marble slabs at the sides of oldfashioned chamber fire-places may be painted in oils effectively. It may be done with equal effect in water-colors, but when interjection, or some other exclaiming maid, comes in with her broom and serubbing-brush, she may destroy in half an hour the work of a week.

Oil painting is secure from destruction in such eases, and for such things may be appropriately used. It scems to me unsuited for painting on plush and velvet, a process entailing a deal of trouble and paint without adequate results. The surface of these two materials is so rich and beautiful as to be injured rather than ornamented by overlying coats of paint. Plush and velvet may be better employed as the body of table-cloths, mantel-cloths, and the like, with borders of decorated silk or satin. The coutrasted contact of the two materials enhances the effect of both.

The painting of fans is a most legitimate use of color in
decoration, and it might well be more in vogue than it is at present. Antique fans are esteemed great treasures, and they are valuable for their historic interest as well as for their artistic merits. An old fan is full of romance and sentiment associated with its old-time artist and wearer. The most distinguished artists lave not scomed to devote their most delicate tonches to this work. Collections and exhibitions of fans show specimens from every century rumning back to Queen Elizabeth's time. They mark, in their way, the progress of art at their different periods. Our century and country should contribute likewise their share to keep up the historic chain. Fans are now made and bought so cheaply, and so well, that amateurs are not much in the habit, with us, of working in this branch of art; but we should not leave the pretty toy in the hands of the Japanese, or the Paris shop-keoper, however well these may supply the demand. A fan should have the association of individual sentiment attached to it. You may not inherit from your great-grandmother a delightful old fan with slender ivory sticks, decorated, by the hand of Watteau himself, with an arch shepherdess and her kneeling swain; but you may have inherited that grandmother's taste cultivated by contemplation of that pretty toy, and her skill in execution.

Fans should be painted before being mounted. Cut or pull to pieces a cheap puper fan, of the size and shape you like, and make this a pattern for the one you propose to paint. The material is fastened down upon a board, and painted according to your knowledge of the texture selected to work upon.

Paper, linen, silk, satin, or vellum is used. Vellum is the best surface for the brush, where great delicacy, accuracy, and high finish are to be employed. A fim may suitably receive all this care ; for it is held in the hand at periods of leisure, when it will receive all possible examination and admiration, if it deserves it.

Upon the other materials mentioned, body colors are best nsed, even if the color is white. Black silk or satin fans are effective, done in one set of colors only, as "grisaille," for instance ; i. e., grays mixed more or less with Chinese white, and the highest lights pure Chinese white. The shadows may be warmed with touches of brown madder and pink. With skill, transparent colors, used very thick, not wet, give a very pretty effect, even on clark silk surfaces.

\section*{MORE ARTICLES TO DECORATE,}

\section*{WITH DIRECTIONS FOR MAKING UP.}

Panels for Clocis. - Take a piece of pasteboard the size you wish the panel, cut a piece out the size of the dial of your clock, then cover with velvet or plush, and paint some pretty design on one side.

Thermoneters and Calendars. - Materials: pasteboard, velvet, plush, satin, or silk, satin ribbon, small silk cord. The foundation, of pasteboard, may be cut in any shape, - round, square, oval, or crescent shaped. Draw the covering over smoothly, then sew on the ther-
mometer or calendar (small printed calendars can be bought for this purpose), putting a bow of ribbon at each end if it is a thermometer. Sew the lining on over and over, and catch on the silk cord to cover the stitches. By covering a narrow strip of pasteboard, and sewing on to the back, it can be made to stand up.

Brush-Cases. - Two pieces of heavy pasteboard as wide as the brush is, at the bottom, and half as wide at the other end; point the widest end; cover the back side with cambric, and the other with silk, satin, velvet, or plush, and paint on it; sew the two pieces together at the sides, and finish with plaited satin ribbon or cord. Fasten ribbon or cord to the widest end to hang it up by. Another and very pretty one is made by taking a small picture-frame and fitting the case into it, the case consisting of two picces of pasteboard the width of the frame, but one being three inches longer, so that when they are sewed together at the top and bottom the outsidc one will give room for the brush. Cover the outside with satin, plush, or velvet, and paint.

Slifper-Case. - The foundation may be made of pasteboard and covered, but a carved frame is prettier. If of pasteboard, make the back 16 inches long by 10 wide, and the pockets to contain the slippers the same width, but only 9 inches long. The pockets are sewed on to the back, and finished with cord.

Umbrella-Case. - A piece of momie-cloth as long as an umbrella, and about 8 inches wide, pointed or rounded at the bottom; another piece 6 inches, more or less, shorter, and a little wider; bind the edges together with
ribbon or braid, and stitch through the middle; paint on each side and on the top.

Shaving-Cases. - A piece of thick Whatman paper or pasteboard covered with silk, satin, plush, or velvet, the foundation cut in any pretty shape, 7 by 5 inches; finish the edge with satin ribbon or cord, and fill with white or colored tissue-paper cut the same size as the case. Fasten ribbon or cord to the upper corners to hang it by. Tilton's Outline Designs can be used for the outside, and painted, or the designs prepared for inlaid painting, instead of Whatman paper, etc.

Bag for Soiled Linen. - Make a bag of momie-cloth half a yard square; if you wish it very pretty, put on bands of velvet at top and bottom, and let the painting come partly on the bands; hem at the top, and fringe at the bottom. Put a strong wire or curtain-stick in the hem at the back to keep it out straight, and hang with ribbons the color of the bands.

Shopping-Bags. - Half a yard of satin, plush, or velvet; line with contrasting color. Make two welts half a finger from the top, and run in two ribbons to draw up by.

Another. - Three pieces of velvet, satin, or plush 5 inches wide, 8 long, pointed at the bottom; sew together and line, and finish with a tassel on each point. Paint each piece.

Tobacco-Pouch. - A piece of plush, velvet, or momiecloth, 10 inches long by 6 wide; cut one end like the top of an envelope. Line with silk, bind, or finish with a cord; sew the sides together; tie the lap with narrow ribbon.

Sunshades. - Any plain silk or satin parasol could be done in oil-colors.

Straw Hats. - Shade-hats for ladies and children would be very pretty with field flowers painted in oilcolors.

Mantel-Scarf. - A piece of felt, plush, or satin for a bedroom, muslin or satine -as wide as the mantel or bracket shclf, and long enough to admit of painting the ends. If felt, put a band of plush on the ends, and small tassels.

Lambrequins. - Cover the mantel, if a wooden one, with a strip of the material of which you are to make the lambrequin, which is simply another strip half a yard wide. If velvet, plush, or satin, line with stiff cambric, and paint them. The lambrequins are fastened on to the shelves with brass-lieaded nails.

Wall-Bracket. - A very pretty bracket can be made by covering pieces of pasteboard with silk or velvet, and finish with balls or tassels. If made of felt, finish with a band of plush. Make the painting come from one side. When finished, tack on to the shelf with small brass nails.

Splashers. - These can be made of satine, muslin, or oil-cloth, three fourths of a yard long and the width of the back of the commode and washstand.

Wall-Pockets. - Two wooden frames the same width, but one longer than the other, filled with straw matting, velvet or plush stretched over a thin board, and fastened together with cord. Another is made of a round fan covered with satin, having a pocket of the same.

Bauner and hand-screens are used to protect the eyes from too strong light.

Folding-screens are used to separate one part of a room from the other, or to keep off uncomfortable draughts. They are often placed in dining-rooms by the door of the china closet.

Banner-Soreevs. - These are made of any plush, silk, satin, or velvet, finished with silk cord. The stands for mounting them are kept at all fancy-shops.

Hand-Screens. - These are simply fans covered with something and painted. For many of these articles, the inlaid velvet, or any of the Outline Designs, prepared and sold by S. W. Tilton \& Co., if prettily painted, would be very effective.

Folding-Screens and Fire-Screens. - For both of these the panels may be covered with paper, plush, satin, velvet, felt, straw matting, and fitted into a framework of wood. The design must be large, and painted in oils. These are placed in front of open fireplaces.

Fireplace-Curitains. - These are made of satin, silk, or plush which will harmonize with the other fittings of the room, and are run on a brass rod in front of the fireplace to conceal it when there is no fire.

Portieres. - Plush, satin, velvet, or felting, or any heavy material. A large design can be painted on the entire portiere. But a broad band, say from 16 to 18 inches, 9 inches from the top, of some contrasting color, and painted, is more effective.

Window-Curtains. - These may be decorated like porticres, or made of muslin, with either a border of flowers or flowers scattered over them.

Clothes-Baskets. - The tall baskets used for soiled clothes can be rendered ornamental by painting some large design on them.

Waste-Baskets and Catch-alls. - These are both useful and ornamental in every room, but baskets are the prettiest; they can be made by cutting pieces of pasteboard the right size and height, covering with momiecloth, felt, or velvet, painting each side, then sewing together, and finishing with a cord.

Piano-Covers. - These are generally made in these days in the same way as mantel and table scarfs.

Clocik-Carpet. - A piece of felt, velvet, or plush, a little wider than the clock, put under it, and long enough to hang over the mantel, this end being painted.

Tidies. - The varieties are almost endless, also the materials used. Silk bolting-cloth in stripes, with alternate stripes of lace, and edged with lace; felt, finished with plush ; silk or satin, with lace.

Roll for Feather Duster. - Cover a piece of pasteboard as long as the feathers, and wide enough to go round them, with velvet, and draw the duster through the roll when hung up.

Musio-Roll. - Make the outside of velvet or plush; line with something stiff first, then with silk, and put cord on the edge, or bind with dibbon.

Frame-Borders. - Frame-borders are the mats over pictures, either mounted in frames, or bound, as in passepartout. Buy or make for yourself a pasteboard mat, and cover with velvet or plush.

Christmas, Easter, Bimthday, or Valentine

Cards. - These can be bought of S. W. Tilton \& Co. ready to paint; otherwise make of wide satin ribbon, fringed at each end. Paint on the satin, and tie on a little card marked with the day.

Sofa-Cushion. - Made of crazy patchwork, with centrepiece painted. Another way is to make the covering of plush a yard long, and one-half wide, and tie with satin ribbon a quarter of a yard from the top.

Toilet-Sets. - Pin-cushion and mats covered with silk or satin, painted, and finished round the edge with plaited satin, ribbon, and lace. Another way is to have a mat of lace to cover the cushion, except a place in the middle, which can be painted.

Bureau-Scarfs. - Can be made of momie-cloth or satine, the painting coming on the ends.

Pillow-Shans. - Are often made of crazy patchwork, with many of the pieces painted. They might be made like pin-cushions, - lace over silk.

Glove and Handierchief Boxes. - Make the box of pasteboard covered with satin, plush, or velvet, and paint on the top and sides. Boxes can be bought at some shops all ready to paint.

Handkerchief Sack. - Take a square piece of satin, velvet, or plush, say half a yard square; line with quilted silk or satin ; finish the edges with cord or ribbon; sew a ribbon on each corner, and tie from opposite corners. Another is a small satin or plush bag suspended between three bamboo, gilt, or chonized sticks.

Key-Board. - Cover a picce of stiff pasteboard with plush. Make six small holes in this, and put small brass
hooks through them; fasten them in firmly, and line the board with silk or satine. Hang up with satin ribbon. These are very useful for button-hooks, keys, and small brushes.

Watch-Cases. - Cat the shape you wish out of pasteboard; make the little pocket for the watch 3 inches long and 1 inch wider than the bottom of the back, and cover with plush or velvet; finish with cord or ribbon.

Table-Mats. - Common straw table-mats can be easily painted and made very ornamental.

Table and Sideboard Covers. - Make of felting or Turk's satin; have the edge pinked, or finished with plush.

Duster Covers. - A bag made of silk or satin, which holds the duster.

D'Orlies. - For finger-bowls, can be made of jean or satine. This should be a quarter of a yard square, and fringed.

Easel, Mirror, and Picture Scarf. - Either of these can be made of satin, silk, velvet, plush, muslin, or bolting-cloth. They should be from \(1 \frac{1}{2}\) yards to 2 yards long and \(\frac{3}{4}\) of a yard wide. Line velvet or plush with silk. Edge muslin or bolting-cloth with lace. Paint the ends, and drape gracefully over the easel, mirror, or pictures.

Shawls. - A square of cashmere or flannel painted in the comers.

Slumber-Robe.- Can be made of heavy flamel, felt, or crazy patchwork, filled with down or wool wadding, and lined with silk, flannel, or cashmere.

Slumber-Roll. - A round cushion covered with plush or satin, and fastened on to the top of the easy-chair.

Carriage Shatwl. - Made of very heavy flamel, with painting in the eentre.

Blanket for Baby-Carriage. - Made like the above, only of some delieate color, and bound with broad satin ribbon.

Dog-Blanket. - Make of flannel, felting, or broadcloth.

Panel for Doors. - A piece of plush, satin, or felting the exaet size of the door-panel ean be neatly taeked or glued on to the wood.

Lamp-Shades. - A piece of silk long enough to go round the shade painted; shirr at the top by running in narrow ribbon; put lace at the bottom, or knot in a fringe of knitting-silk.

Slippers. - These can be made of velvet, plush, or broadcloth.

Fans.-Plain satin and silk fans are among the prettiest articles to decorate.
- Palm-Leaf Fans. - Are very effeetive for wall decoration. Muel the easiest way is to take them to a paintshop and have the baekground put on it, then put in the design yourself. They are very pretty gilded, or bronzed.

Blotters. - Take six pieees of blotting-paper the size you wish; tie them together with satin ribbon, and paint the first one, which forms the cover.

Sachets. - A pieee of satin ribbon \(\frac{1}{2}\) yard longrand 1 yard wide. Fringe the ends, and sew the sides together halfway up, and trim round with narrow lace. Fill with cotton sprinkled with sachet-powder, and tie with narrow
ribbon below the fringe. Two of these made of wider ribbon or silk are tied together, and lhung on an easel or the back of a chair.

Book-Covers, Portfolio-Covers, and PhotographCases. - These are all made in the same way. A piece of satin, velvet, or plush long enough to be turned up at each end, that the book or photograph may be slipped in.

Tables. - Covered with plush are very ornamental. Have a carpenter make a pine table, round top, or shape of clover leaf, with three legs crossed in the middle; ebonize the legs, and tie with bunch of bright ribbons where they are crossed. Cover the top with plush or felting.

Milining-Stools. - These are now used as parlor ornaments. Take them to a painter and have them painted or gilded, then put some design on them, and tie bright ribbons round the legs. Sometimes these stools are upholstered.

\section*{DIRECTIONS}

\section*{FOR}

\section*{PAINTING THE CUTS AT HEAD OF CHAPTERS.}

The cuts which are at the beginning of the chapters may all be used as excrcises in color, - the landscapes for practising the wet washes of transparent water color described in chapter -, and the flowers for trying the different kinds of paints. The flowers also may be used as embroidery patterns, as I will explain with each.

\section*{CHAPTER 1.}

The illustration which heads this chapter is a little landscape. You may practise enlarging it by putting a little scale in the corner as described in chapter III. Paint a gradated sky with cobalt at the top, running down through yellow ochre to the foreground, where it may be changed to blue for the water and gray for the land. The hill in the foreground should be colored bright green (gamboge, indigo, and a little touch of light red). 'The grove in the middle distance should be painted a bluer green (cobalt and yellow ochre), and the hills in the distance a pale purple gray. The rock under the tree should be light red, with a cool cobalt shadow.

\section*{CHAPTER II.}

This pale flower is pretty for painting on light silk with transparent colors. The upper flower will show on a light background if painted with delicate tints of crimson lake. The flower, relieved by its own leaves, may be left nearly white. The tips of the third flower may be pink, the rest left white, relieved by the leaves. The green, mixed with indigo and gamboge, should have plenty of crimson lake added to it, as the leaves of the anemone are more crimson than green.

\section*{CHAPTER III.}

A gradated sky running from deep cobalt to rather bright yellow ochre at the horizon, changing to blue again for the waves, and to gray for the sandy shore. The rocks may be light red, with ccoalt mixed in it for shadows.

\section*{CHAPTER IV.}

This will make a pretty continuous pattern if you take at little pains to alter it where it would join. It may be used for painting on dark velvet with thick gouache color, as crimson lake or the liquid carmine combines well with Chinese white. The leaves should have a good deal of lake in them.

\section*{CHAPTER V.}

Gray clouds, the water gray, the distant hills pinkishgreen, of cobalt, yellow ochre, a little lake; the bars a dark gray, made of cobalt and light red; the foreground green, relieved by glimpses of light red.

\section*{CHAPTER VI.}

This design would be pretty good for Kensington stitch, there are so many long marks in it, which you can make with a pen or the pointed stick. The colors should be light pink for the flowers, and blue-green for the leaves. You can easily alter the shape of this design by lengthening the stems.

\section*{CHAPTER VII.}

This great anemone, so different from our delicate ones, grows abundantly in Syria and the south of. Europe. It should be painted with rich scarlets, such as you can find among Tilton's liquid colors. The centres are nearly black, and the leaves bright green.

\section*{CHAPTER VIII.}

Paint this for variety with a gray sky, ruming into
yellow over the water; the hills gray against the yellow. The trees may be bluish-green, to represent willows; the sloping ground at the left a brighter green, and the road light red in tone to relieve the sombre grays.

\section*{CHAPTER IX.}

This flower is an odd color, as it grows in Egypt - a sort of chocolate. It would be effective done in Lustra, with chocolate for the flower and buds, and some gold in the green leaves. It may be made a continuous pattern with very slight alteration in the direction of the stems.

\section*{CHAPTER X.}

A little landscape which you may paint to your taste, with, for instance, dark blue mountains against a glowing yellow sky; brighter greens in the foreground.

\section*{CHAPTER XI.}

This Spanish magnolia is here only about a third of its real size; the flower I drew it from measured ten inches across. Thus enlarged it would be effective in silver lustra paints, with a gold centre and bronze and green leaves.

\section*{CHAPTER XII.}

Landscape, with bulrushes; - which may be painted in darik browns and greens against a blue sky, the river gleaming white in the distance, dark blue in front.

\section*{CHAPTER XIII.}

This landscape may be rather lurid in effect, with a crim-son-tinted yellow for the sky and water, the rocks and beach dark against it, painted with cobalt and light red.

\section*{CHAPTER XIV}

These little Alpine flowers are intense ultramarine blue, with bright green leaves. The pattern is continuous, and would be pretty painted in Tilton's liquid colors on the straight edge of a towel or some washing material.

\section*{CHAPTER XV.}

This may be painted, just as it is, in transparent watercolor - bright greens made of Antwerp blue and gamboge. With a little adaptation it would go well on a fan of white paper or silk.

\section*{CHAPTER XVI.}

The receding road with poplars will look well against a clear sky, gradated from cobalt blue through yellow ochre to rose, made by adding a little pink. The trees on the left should be darker, with more blue in them than those on the right. Bright green turf should run down to the road, which may be colored either gray or light red.

\section*{CHAPTER XVII.}

This will be best on a background, leaving the flowers white. If the background be not too dark, the green leaves may be painted over it. These snowdrops are the size of life.

\section*{CHAPTER XVIII.}

This will serve as good practice for a clear gradated sky reflected in the water. The sails may be painted dark gray against the background, or left out white.

CHAPTER XTX.
Cobalt sky, gray clouds, bright green bank, yellow ochre cliff, gray sand, a white curve to indicate surf, and bluegray water.

\section*{CHAPTER XX.}

Cobalt with a little crimson lake will make these violets; they are rather brighter than the New England ones. The stems should be light yellow-green and the leaves darker.

\section*{CHAPTER XXI.}

The sky clear cobalt, somewhat gradated. The rock gray, almost yellow ochre on the light part, the tree dark green, with touches of light red, and light red in the foreground. The hills warm gray, a little blue on the water.

\section*{CHAPTER XXII.}

You may make a pretty gray effect of this by painting almost everything in grays, except the rock, which may be light red, with cobalt in the shadows.

\section*{CHAPTER XXIIT.}

I should like you to study the tints of some real rose in painting this, to put in practice the laws of complementary color in delicate shading. The design may be enlarged about one third.

\section*{CHAPTER XXIV.}

This is a continuous pattern. Eularged it would do for Kensington stiteh painting.

\section*{EXPLANATION}

\section*{OF THE}

\section*{'TECHNICAL WORDS USED IN THIS BOOK.}

Arabesque, or Moresque. Ornaments with which the Arabs adorned the walls, ceilings, and floors of their buildings. Fruits, flowers, mathematical figures, in short, everything except the forms of men and animals, which were forbidden by the prophet, were thus fantastically used by them.
Artist. One who exercises the fine arts, meaning thereby the plastic arts especially. This term is by some writers made to include the musician, and by others even the poet, but it is properly limited to the sculptor, painter, and architect.

Decorative Art. A generic term used to designate that branch of the fine arts which is exclusively devoted to ornamental enrichments of every kind.

Chiaro-Oscuro. That important part of painting which relates to light and shade. The aim of painting is to form a picture by means of light and shade, and by colors and their gradations; the more truly painting accomplishes this end, the more artistic it will be.

Dragging. The brush, being charged with thick paint, is held loosely in the hand, and dragged over certain parts.

Foreshortening. The art of representing objects on a plain surface as they appear to the eye, depending upon a correct knowledge of form, perspective and chiaro-oscuro. It is one of the most difficult studies in the art of design, and, when executed with skill, constitutes the excellence of the master.

Glazing is that part of the practice of oil-painting which consists in the application of an extremely thin layer of color over another for the purpose of modifying its tone. By glazing the painter can produce certain effects, such as transparency and mellowness, impossible with the
aid of solid pigments alone. The color employed in glazing shouid be of a darker tint than the solid pigment over which it is laid.

Half-Lights. The lights of a picture intermediate between the high lights and shadows.

Harmony. The principal means of producing effect in works of art. It consists in the unity, connection, similarity, and agreement of one part with another under the relations of form, light, and color.

High-Light. The brightest light on an object or in a picture.
Lambrequin is a French word, defined as "the ornamental covering for the helmet of a knight." Anglicized, it means a piece of drapery pendent from a shelf or from a window for the purpose of ornament.

Landscape. A general view of any portion of the open country not comprehending street architecture or views of edifices merely.

Local Color. See page 110.
Medium. .The liquid with which pigments are mixed and made ready for the artist's use.

Ornament. All the accessory parts of a work which lave the merit of adding to its beauty or effect. Ornament, in the true and proper meaning of the word, signifies the embellishment of that which is in itself useful in an appropriate manner. Yet by a perversion of the term it is frequently applied to mere enrichment, which deserves no other name than that of umeaning detail dictated by no rule but that of individual fancy and caprice.

Palette. A piece of wood, usually of walnut or mahogany, upon which the painter lays the pigments with which he paints his pictures. To "set the palette" is to lay upon it the pigments in certain order, selecting them according to the key in which the picture is to be painted. In "The Art of Painting Restored," an excellent plan of arranging the palette is given, the order being to commence with white, and then proceed through the yellows, reds, and blues, to black, by which every possible tint can be compounded.

Pigment. Paints, colors; the colored material used in painting. They are partly artificial and partly natural productions, derived from the three kingdoms of nature, but chiefly from the mineral ; and, even when of animal or vegetable origin, they are always united with a mineral substance, an earth or an oxide, because in themselves they have no body, acquiring it only by union with a mineral.

Plaque. (1) A flat plate of metal upon which enamels are painted; hence the word is applied to designate the small enamels themselves, done at Limoges in the fifteenth century. A similar flat piece of china, used for decorative purposes, and upon which pictures were painted, is also termed a plaque, as well as the shell used to guard a sword-hilt.
(2) A decorated plate or sancer, designed to be hung upon a wall to ornament a room.

Poitiere. A curtain hanging across an opening for a door, or used as a screen.

Realistic. Faithful to nature or to actual life in artistic or literary productions.

Repose (1) alludes to that quality in painting which gives it entire dependence on its inherent ability, and does not appeal by gaudiness of color, or exaggeration of attitude, to a false estimate of ability. A general quietude of color and treatment, an avoidance of obtrusive tints, or striking action in figures.
(2) That harmony or moderation which affords rest for the eye is generally compreliended by this designation when applied to a work of art.

STIPPLiNG is a process by which the effect is produced by dots instead of lines.

Tone. The prevailing color of a picture, or its general effect.
Value. See page 103.
Vehicle. Another term for Medium.


Sent by Mail, postpaici, on recript of price, \(\$ 2.00\), by

\section*{S. W. TILTON \& CO.,}

333 W ashington St. (up one flight).

\section*{BUL_FINCH'S MYTHOLOGY.}

\section*{TE F}


CONTAINING THE STORIES OF THE

\section*{GODS AND HEROES,}

Which form the subjects of by far the greater portion of the

\section*{ANCIFNT PAINTINGS AND STATUARY}
to be found in the ART MUSEUMS of the Oid and New Worids. By THOMAS BULFINCH. An Enlarged Edition, printed from entirely new type, with over One Hundred New illustrations from Ancient Paintings and Statuary.

\section*{Edited by Rev. E. E. HALE.}

Without a knowlege of Mythology much of the elegant literature of our own language cannot be understood and appreciated. In this volume the stories of Mythology are told in such a manner as to make them a source of amusement and to give our work the charm of a story book, yet by means of it to impart a knowleadge of an important branch of education.

In the new edition the publishers have added very largely to the value of the book, as well as to its beauty, by the numerous illustrations from the very best classical scurcer. The reader will see that these illustrations, in reproducing the masterpieces of ancient art, give the best ilea which we can have of the conceptions which Greek and Roman had of the sacred beings in their Mythology.

We trust our young readers wili find it a source of entertainment; those more advanced, at useful companion in their reading; those who travel and visit mascuns and galleries of art, an interpreter of paintings and sculptares; and those who mingle in cultivated society, a key to allusions which are occasionally made.

The book has been so widely and so successfully used in schools that it seems proper to add that this new edition is considerably enlarged.

\section*{}

Sold at our Chambers, 333 WASHINGTON STREET, Rosion, or sent by mail to anz address on receipt of price, \(\$ 2.50\).
\[
\begin{aligned}
& A=8 x \\
& 8629
\end{aligned}
\]```


[^0]:    * On page 284 I have slightly given you the colors for tinting my illustrations at the head of chapters, which you may follow with the aid of your own taste and skill.

[^1]:    * For other information on this subject, see "Artist Colors, and How to Mix Them."

[^2]:    * Or Cadmium if you have it.

[^3]:    ${ }^{1}$ Otherwise see list of Tilton's 'Transferring Designs.

